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Biological & Medical Serials

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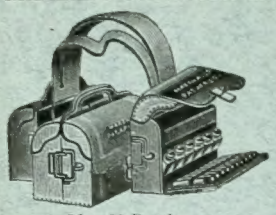

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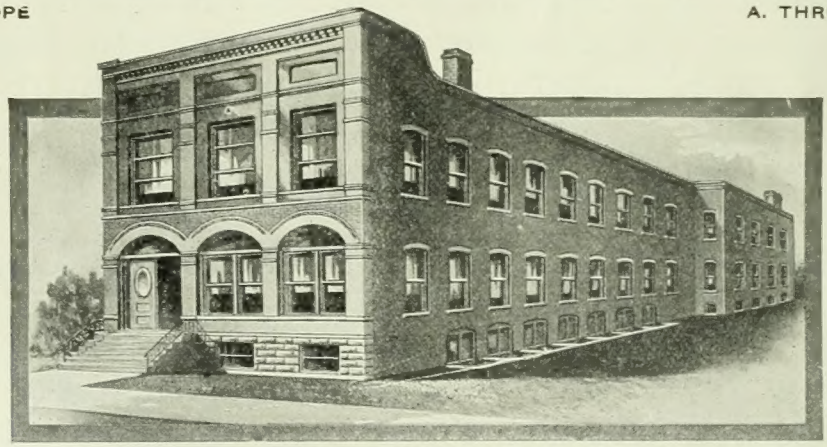

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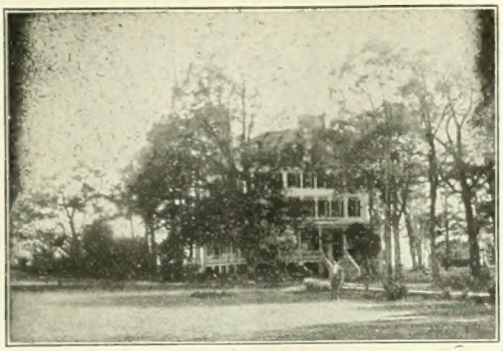

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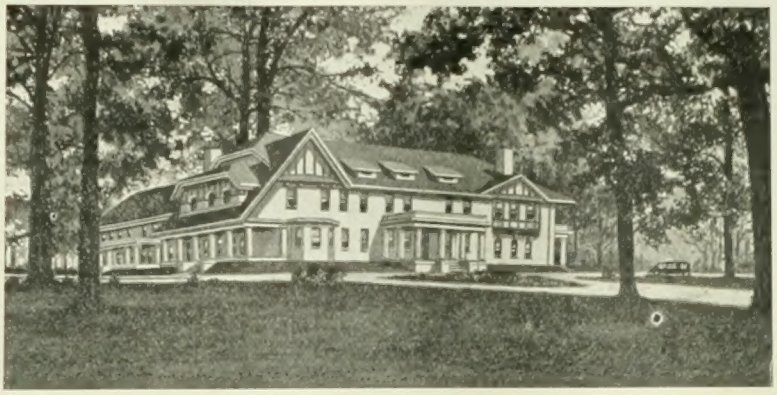

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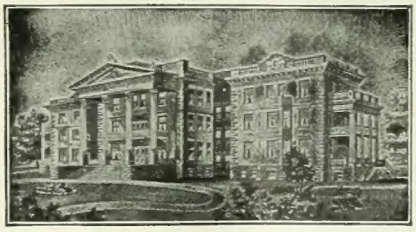

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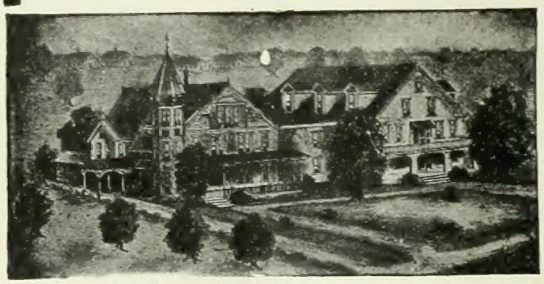

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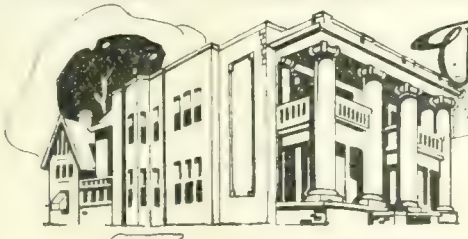

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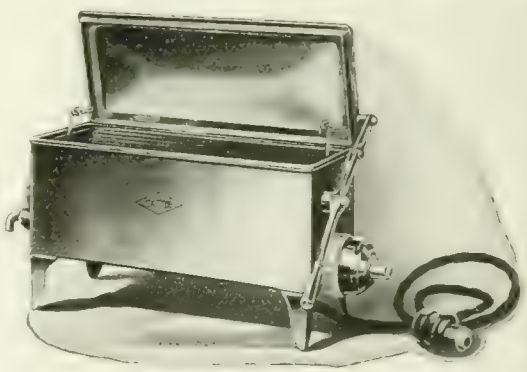

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Volume X DECEMBER 1, 1917 Number 12

THE WORLD'S WAR—OUR DUTY IN THE PRESENT CRISIS*

By Duncan Eve, A.M., M.D., F.A.C.S., Nashville, Tenn.

I desire most sincerely to again express my heartfelt gratitude and appreciation for the honor conferred on me at the last meeting of this, the greatest and most important medical organization in the South, and second only in prominence and numerical strength to our great American Medical Association. It is a further gratification to meet with the earnest and progressive representatives of Southern medicine and surgery in this great metropolis on the western border of my own State.

Inasmuch as it has been determined that this meeting shall be a "War Session," my address as your President will avoid technical lines, and in order that I may devote the brief period to certain points and ideals that are, or should be, of paramount interest not only to you as professional confreres, but also to those of the general public who have honored us with their presence, I beg leave to call your attention to some important, as well as imperative, considerations of "The World's War—Our Duty in the Present Crisis."

Since the last meeting of our Association our grand and glorious country has become involved in the great and terrible war that has so touched and taxed not only the well being, but the very lives, of so many of the people of nearly all of the civilized nations of the world.

War is an armed contest between nations, or between different factions or parties of the same nation; an armed contest breaking out in consequence of disputes, differences or disagreements about territorial possessions, material, commercial, political or religious interests. At times, the art of war is considered to consist of wearing out the opponent by a slow process of exhaustion, and as a result is much protracted—even over many years; some countries have, however, rather endeavored to strike an effective blow by which it would be the sooner ended and less productive of suffering. International war can only be authorized by the governing powers of the nation, and previous to commencing hostilities it is the custom to declare a state of war by the authorized powers for the information of the opponents and neutral countries.

Certain customs, usages, rights and procedures have been established by treaties and recognized as "International Law" by civilized nations, under which it is right to kill and wound soldiers of an army, but only while engaged in actual combat; to capture and confine not only the officers and soldiers but civilian officials of an enemy, the confinement being restricted to reasonably humane measures. It is also considered right to occupy the territory of an opponent, temporary or permanently; to seize and use food, fuel, munitions, etc., of an enemy; to bombard, shell and fire on the fortified towns and cities of an enemy and those occupied by enemy troops; to blockade ports and exclude all traffic by land and water, even to the starvation of the people, in order to force them to surrender. But it is not right or in accordance with International Law to destroy towns and cities unoccupied by soldiers, and churches and hospitals; to kill women, children, unarmed and old men; to mutilate and torture prisoners of war in order to secure information; to use poison in food or drink, together with other provisions and restric-

*President's Address, Southern Medical Association, Eleventh Annual Meeting, Memphis Tenn., Nov. 12-15, 1917.

tions that are not in accord with rational humanity, to aid or prevent the success of either party.

The war now convulsing almost the entire part of the civilized world is "Our War." I will not tax your time by going into its origin; however, it is an indubitable and indisputable fact that with all its dread alarms, its vicissitudes, possible dangers and disasters, it was forced upon us. Our most excellent and capable President was elected by a majority vote of our citizenship; and our representatives in Congress by a majority of their respective constituencies. With a patience and forbearance that almost ceased to be a virtue, after the reckless and wilful murder of our fellow-citizens, not only men, but women and children; lives and property ruthlessly and cruelly destroyed in direct violation of all law; with no desire to pay heed to our rights, as neutrals, time and again; with an utter disregard of their own assertions and promises, what else could our authorities do than declare a state of war existed between Germany and the United States? This was done without partisanship and with so near a unanimity as to be remarkable and astonishing beyond measure. I state again that it is "Our War." Yes, because our enemies are against the great principles of humanity innate in every American heart and mind; and because of the brutal treatment and murder of the old men and children, together with the murder, and worse than murder, of women.

The main point for us to consider is that our country is a party to the conflict, and *we must* and *shall win*. No man can separate himself from his country's needs and still live in it with credit to himself. Its success is his success, its prosperity is his prosperity, and he must suffer as it does. If it goes down so must he and all that is his. A man's first duty is to the God that made him, next to the country that bore him, then to his family, his neighbor and himself. He is but one of the many that constitute the nation, but a single atom of the whole. If our country goes on to higher achievement, to greater prosperity, to grander accomplishment in all that pertains to civilization, we will be a part and parcel thereof; consequently, we owe it our best and most earnest efforts.

The actual fact is before us that our country is at war. If we do not win, we will certainly suffer prestige and material damage. All history teems with the woes that followed nations once great that failed in success on the field of battle. Our great Nation less than a century and a half since making its first essay at war's dread game, with only three million people, in order to protect its liberty against the demands of one of the most powerful nations of the world succeeded, and we are here today because of that success. Sordid gain, imperial aggrandizement or territorial accession has never caused it to unsheath the sword. Now, as in the past, in order to defend our liberty and freedom; to protect democratic principles from autocratic demands and encroachments, we have been forced to "take up the gage of battle."

Three years ago we hoped that the impending war cloud in the East would pass harmlessly by. Hoping against hope until it became hopeless. We still want peace; but we want *no peace* that will degrade our now great country of one hundred millions of free people; lower its rank, or imperil its future. The quickest and most practical way to get peace, and such a peace as we only desire, is to strike at once and with the hardest blows possible against a ruthless, stubborn, determined and vindictive aggressor; not the German people, but the autocracy that holds in bonds sixty millions of people who deserve and should, and I sincerely hope will, have a better future through the help of the American people and their Allies. A free government of its people, by its people and for its people does not mean a weak government. As Americans we are able and should show our democracy to be not only able, but superior in efficiency to that of the Teutonic autocracy.

In order to win speedily and with the least sacrifice of blood and treasure, we must have unity of purpose; martial spirit subordinate to effective discipline. A state of war permits no lagging, no laxity and *no slackers*. Anything savoring of treason is intolerable and a rigid enforcement of all that the successful conduct of war demands or requires is imperative. Each and every son of America, native or by adoption, should therefore at once respond

promptly and willingly to do that which the exigencies of war require of him. "He that is not for us is against us." There is no compromise ground; recalcitrants are doing the country harm and are consequently aiding the enemy. They are cultivating and developing sentiment that will afford encouragement and comfort to those with whom we are fighting. No true American can now stand for anything that may in any way hinder the country in a vigorous prosecution of the war; and every one now enjoying the rights, privileges and honors of being an American citizen, endowed with proper reason and feeling, with right instincts and principles, will do all he can to promote the country's interests in this crisis.

We of the South have much in the records of our ancestors to inspire us with heroism and patriotism, and we must uphold the standards of those who have gone before us.

The profession which we love, honor and practice, and which honors us, is expected to do its part. It has never failed in its past eventful, glorious and illustrious history. Enjoying the benefits and emoluments of our most honorable art and science, made sacred and holy by the Son of God Himself, His beloved disciple Luke and the host of the noble and self-sacrificing men of past and present time, is it not our duty in the present crisis to be up and doing? Shall we not promptly, willingly and sincerely tender our services, the best that we have to our country, to our people and to the great cause of humanity and liberty in its struggle against an imperious, overbearing autocracy? The crisis is here. Shall we meet it as only sons of such an ancestry and such a fair land should?

War antedates both traditional and written history. The care of the wounded and disabled in battle dates far back, for in the time of Adrian we read of tents set apart for the wounded, and in the Dacian wars Trajan had something like ambulances. In the ninth century special corps for the care of the wounded were organized by Leo VI. One of the earliest measures of military prophylaxis was the maternal plunging of Achilles into the River Styx, making his entire body invulnerable with the exception of the heel, grasped by the hand of Thetis.

As "time put his sickle in among the days," as the centuries rolled along many improved measures and methods of staying the hand of the grim monster astride the pale horse, as well as restoring to efficiency the shattered and mutilated units of armies were evolved, developed and resorted to. At the siege of Metz in the sixteenth century Ambrose Pare made application of ligatures to arteries, thus relegating to innocuous desuetude the boiling oil and actual cautery as a means of controlling hemorrhage. Just prior to the great war between the states, the third successful hip-joint amputation in the world was performed in the capital city of this State. During that great internecine struggle of four years it was time and again a successful expedient in the hands of both Northern and Southern surgeons; but it was reserved for a Southern cavalryman, Dr. John A. Wyeth, who rode with that impetuous and wonderful "Wizard of the Saddle," Bedford Forrest, to develop and demonstrate his method of rendering this major amputation bloodless. Yes, many of the advanced and progressive measures and procedures of both medicine and surgery will be found among the great gifts of army medical men to mankind. However, they are all matters of record with which we are more or less familiar, and I will therefore only mention further the demonstration of the true cause of malaria and yellow fever by the lamented Reed and Lazar and the practical application of the facts by the present Surgeon-General of our Army, Dr. W. C. Gorgas, in Havana and on the Isthmus, absolutely immeasurable in value to both civil and military life. Finally, along this line, is the Carrel-Dakin antiseptic method that is saving life and restoring to comparative normal function those suffering from the mutilations and lacerations acquired in battle.

During the latter part of the year now rapidly drawing to a close the United States Government has been organizing the largest number of soldiers that it has ever before enrolled, about one and a half million men; but the vanguard, however, of a much larger army if the war should be protracted far into 1918. Extraordinary measures are being exerted, thorough and as near perfect as possible; a truly Herculean task to provide for the trans-

portation, food, clothing, arms, munitions, and last but not least, the physical condition, care and comfort of so great an army, composed as it is of the pick and span of the young manhood of our land.

The great Napoleon said that "an army traveled on its stomach;" however, our late war with Spain and the latter contest between Japan and Russia demonstrated another point that was of great importance in securing military success, namely, the physical condition in camp, in training, on the march and on the battle line of the units composing an army. We can never again tolerate the admission of "embalmed beef," or preventable infectious diseases within our ranks; the typhoid tragedy along the banks of the "River of Death" in the latter part of the last century must ever be a thing of the past. These and other hygienic details are relegated to the Medical Department of the Army, as well as the general care and protection of the soldiers with the earliest possible return to duty of those temporarily disabled by shock and shell, bullet, bayonet, shrapnel or gas.

For this important work of humanity and conservation of our military strength we need not only a large number of physically and practically fit physicians and surgeons, but specialists well qualified, among whom we will mention the hygienist and sanitarian, the bacteriologist, the ophthalmologist, the radiologist, the orthopedist, the oral surgeon, the neurologist and those that have made special study of pulmonary, digestive and intestinal disorders. Young professional men—those between 25 and 40 years—are wanted. This is the "young man's" day; and our contest to be determined in far distant lands, across the wide Atlantic, men of more advanced age can not so well stand the stress incident to present warfare. One not physically fit in rank or file is but an impediment, a burden on an army. Our young men are especially honored by the Nation in being selected for the work ahead, whether drawn from rural or urban walks. Quite a number have answered to the call of duty; but others are needed.

Our armies have been changed in organization, making them similar to those of Great Britain and France. Companies, battalions and regiments are nearly double in numerical strength. Seven medical officers are now required for a regiment, in addition to a number of others in base hospitals, transport of the wounded by ambulances and on sea, as well as for administration work. Fully 20,000 at least will be required in a short while for the large number of troops that will follow the Stars and Stripes, and I beg leave to make a special and earnest appeal to my colleagues of the South to send in their applications for commissions.

Physicians are as essential to the success of an army as line, field or staff officers, as arms, munitions, food and transportation. If our troops are to be the deciding factor in this terrible conflict now raging in Europe, the Surgeon-General's office must be supplied with a sufficient number of doctors. The medical officer plays a most important part in keeping an army efficient and capable of success; not only fit for fighting, but in returning to the fighting line a large number of those temporarily put out of action by being wounded or by sickness. No matter how great the calamity in civil life, tempest, tornado, conflagration, epidemic or what not, the doctor is always ready to offer his services and is usually the first on the scene to save human life and allay distress and suffering. How much more important is it, then, that in the present crisis he should come forward and offer his invaluable aid in not only preserving the life of his fellow men, but that of the Nation itself?

According to our latest directories there are about 150,000 doctors in the United States. Of these, we should say about one-third are out of practice or are physically unfit; of the remainder, one-fifth, or 20,000, are needed to supply the immediate and essential wants of the Surgeon-General's office. This is by far a greater number than was ever before required at one time in our Nation's existence. This is possibly the greatest factor in our present deficiency, many thinking that their services are not wanted, or that an ample number have been secured. I feel confident in the assertion that in the last fifteen or twenty years an ample number have been honored by those magic letters of mark, M.D., by our standard medical schools to supply the demand without hardship to the civilian population.

The commissions offered to medical men are: First Lieutenant, with pay of $2,000 per annum; Captain, $2,400; and Major, $3,000. Equipment, consisting of uniform, blankets, etc., will cost about $150; and the outlay for provisions, or mess, as it is termed, at actual Government cost as it is furnished by the Commissary Department, will average about $25 per month; leaving at the end of the year, if desired to send home, about $1,500, $2,000 and $2,500, depending on the rank.

I beg leave to differ with some of my friends in their reference to the sacrifice made by medical men in entering the Army or Navy. I do not regard it as a sacrifice, but a *duty*. What a grand word! One going through life with duty as his watchword can ever feel a just and enviable pride; traversing life's highways and by-ways he can stand erect before his fellow man and be able to answer promptly and distinctly *adsum* at the last great roll call. No, it is not a sacrifice, and I speak from personal observation. Although too young to participate in the War of the Sixties, I was old enough to notice then, and, subsequently, after the later war with Spain, that the members of the medical staff, on their return to their homes, immediately took high rank with their colleagues and the citizens of their locality. In this I feel confident that I will be sustained by those of you who are of more mature age than myself and those few who may be among us who wore either the blue or the gray.

Further, I will hazard the assertion that taking two young men of equal physical, mental, moral and social qualifications, graduating the same year in the same medical school, one entering the Army or Navy, the other staying at home. After one or more years have passed, the war having closed, the former having responded to the call of duty and entered the Army, on returning will at once take an equal stand if he does not excel his one-time classmate, whether in the thronged city's mart or the more peaceful shades of a rural community. The older men in the profession can do much toward encouraging and stimulating the young men, more especially those not yet too firmly anchored by family ties; and even these should give way, except in rare and extraordinary conditions, to our country's demands. Our beloved Southland has always held its own in army, navy or civil life; and its medical men have ever been the peers of any other section or nation. To you, fellow members of the Southern Medical Association, I make this special appeal.

All wars are destructive and devastating, and while the one now so sadly marring the fertile, beautiful and historic fields of central Europe, making ruins of hamlets, villages, towns and cities, as well as productive of the death and maiming of so many human beings, it has so far proven less destructive than its predecessors; and in acocrdance with the now established fact that with the increased development of firearms the death rate in battle has steadily diminished. The mortality during the last three years has been less, per thousand, than during the four years' struggle between the Northern and Southern sections of our own country. The French High Commissioner to the United States, M. Andre Tardieu, has recently given figures as to the per cent. of mortality in proportion to the mobilized strength in the French Army, which prove the facts as stated. Mr. Roger Babson, an able statistician, stated recently, after an exhaustive investigation, "that fourteen out of fifteen have been saved so far;" and our boys going at this state of the war, with the experience and knowledge as to protection, will come back in relatively larger numbers than the Allied ranks that have first faced their foes.

Some pitiful pacifist or malicious Teutonic propagandist has circulated greatly exaggerated statements with reckless disregard of the truth characteristic of such cattle as to the casualties in the Medical Corps with a view to discouraging or deterring American medical men from offering their services; even in some instances these statements exceeding the entire number of the medical staff of our Allies. These have been positively contradicted by Colonel T. H. Goodwin, of the British Medical Corps, who has been detailed for service in an advisory capacity to Surgeon-General Gorgas. In response to a cablegram for exact information, he submitted the following:

Total casualties among medical officers on the

Western front from the beginning of the war to June 25, 1917, are as follows:

Killed	195
Wounded	707
Total battle casualties	902

In addition, sixty-two medical officers have died from sickness.

This is but a very small per cent., considering the number of English and French surgeons engaged in battle.

I desire to call your attention to a duty that pertains not only to our profession, but to our representatives in Congress and the general public whom they represent. I refer to the inadequate rank of the medical staff of our Army. It is lower than that of any other nation or world power, and also than that of our own Navy. This important matter has been brought out by Major Victor Vaughn, now on duty in the Surgeon-General's office, and is embraced in the remarks of Senator Robert L. Owen, of Oklahoma, in his speech in the United States Senate July 20 last, advocating his amendment to Senate bill 1786. These views are heartily supported by the Medical Board of the Council of National Defense, including Surgeon-Generals Gorgas, Braisted and Blue, together with distinguished medical men in every state of the Union.

Among the manifold and logical arguments, the following may be briefly cited: the suggestions or advice of a medical officer of commensurate rank is far more apt to be accepted favorably by the commander of an army, a part of an army or a detachment, than it would be if coming from one of inferior grade or much lower rank—measures, methods and views looking to the maintenance of the physical fitness of the men emanating from a Major-General, a Brigadier-General or a Colonel than from a Major, Captain or Lieutenant. This was demonstrated by the investigation of the miserable conditions in 1898.

The pay is not proportionate to the qualifications essential to and the responsible duties required of an army surgeon in peace or war. More adequate rank and better pay would invite a better class of medical men to seek positions in the Army. Furthermore, as a rule, line, field and staff officers are supported and educated in a school of high grade for four years by our Government; while the Army surgeon is required, after having acquired a certain degree of educational qualifications, not only to devote five years to additional study, but to pay for his food, clothing, books and college fees. To the one, is open the highest rank in the Army; to the other, only a limited grade. It is up to you, gentlemen of the Association, and to you, the general public, to bring this matter to the attention of your representatives in Congress. With unity of action, it should secure early enactment at our next congressional session.

Another point that I consider worthy of attention is the education of a reasonable number of young men, capable and physically fit, by the Government for Army and Navy surgeons. We have now in Washington an excellent medical school where all on passing the required examination for commissions in the Army and Navy are given a special course of instruction, at the expense of the Government. I would suggest, if you please, that this school be enlarged and a number of young men adequate to the needs of the Army and Navy in times of peace, proportioned according to the population of each state, selected by the governor or other designated state authority and educated for Army and Navy surgeons, as is done with cadets at West Point and Annapolis, where officers are furnished for the Army and Navy.

And now in conclusion, I beg leave to quote from our most estimable Chief Magistrate utterances that are "ringing around the world":

"The purposes of the United States in this war are known to the whole world—to every people to whom the truth has been permitted to come. They do not need to be stated again. We seek no material advantage of any kind. We believe that the intolerable wrongs done in this war by the furious and brutal power of the imperial German Government ought to be repaired, but not at the expense of the sovereignty of any people—rather a vindication of the sovereignty both of those that are weak and those that are strong."

"The object of this war is to deliver the free peoples of the world from the menace and the actual power of a vast military establishment, controlled by an irresponsible government which, having secretly planned to dominate the world, proceeded to carry the plan out without regard either to the sacred obligations of treaty or the long-established practices and long-cherished principles of international action and honor; which chose its own time for the war; delivered

its blow fiercely and suddenly; stopped at no barrier either of law or mercy; swept a whole continent within the tide of blood—not the blood of soldiers only, but the blood of innocent women and children also, and of the helpless poor; and now stands balked but not defeated, the enemy of four-fifths of the world."

I would further say to you who are adopted sons of America, you have taken an oath of allegiance to this Government, you are fellow citizens, barred only from one of its official positions, enjoying the rights, privileges and liberty of an American; and I feel confident in the highest degree that each and every one of you who can, without too great distress and privation of those having claims on you, will promptly respond to our Nation's call."

To you who are "native and to the manor born," I will quote the following from a most illustrious poet:

"Breathes there a man with soul so dead
That never to himself hath said,
This is my own, my native land!
If such there breathes, go mark him well;
For him no minstrel's raptures swell;
Proud though his titles, power and pelf,
The wretch concentrated all in self,
Doubly dying shall go down
To the vile dust from whence he sprung
Unwept, unhonored and unsung."

THE FRENCH SANITARY SERVICE*

By Charles U. Dercle, M.D.,
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I esteem it a great privilege and a high honor to be admitted to your Southern Medical Association. When your Executive Committee paid me the compliment to invite me here I gladly accepted the invitation, because it seemed to me that this, above all other times, is the time for common council, for the drawing together of the hearts and minds of the medical men. I thought it was a good opportunity for disclosing to you some of the thoughts about the French Sanitary Service that have been created, in my mind, during the war.

*Address, Public Session, Southern Medical Association, Eleventh Annual Meeting, Memphis, Tenn., Nov. 12-15, 1917.

It is not my intention to take up your time by describing the activities of the entire Sanitary Service in this war, a subject which is so complicated that it would consume several lectures. I would like, only, to review rapidly the progress that has been made in the French Sanitary Service since the beginning of the war and to explain the causes which have led to these advances.

First, the fact which has dominated the entire history of wound treatment in this war, and has upset all statistics, is the multiplicity of wounds observed in most cases on the same individual. Multiple wounds are, as a matter of fact, the rule in this war. No one knows this better than myself, for I may say that I hold the record for the French Army. This character of the wounds is due to the fact that they are made by the modern engines of destruction, especially the artillery projectiles, which scatter in many fragments after the explosion. Bullet wounds are now relatively rare, and as for those that are made by bayonets, these are not often observed in field hospitals. You can guess the reason for it,—they are rapidly fatal. These multiple wounds are always serious, particularly because they are always accompanied by intense shock. It is necessary to have seen these unfortunate men injured by ten or fifteen fragments of shell—my own record is considerably higher than this—in arms, legs, thighs and body, bled to the color of lead and in a state of complete anesthesia in the injured part. One keeps them warm, injects serums, camphorated oil, or ether. Their pulse remains small, their face pale, their respiration short and interrupted by occasional deep respiration. With trembling voices they ask for drink and even for food, and then without having any indication, they vomit and often die upon the operating table before they have been dressed or warmed, and without our having been able, by examination, to discover the slightest thing that could have caused their death. In others who have been less severely injured, the body temperature can be brought to normal easily. One can disinfect them and dress their wounds, and one almost believes we have saved them; then, the next day they are dead. Others can survive the shock, but rapidly become the prey of serious infection. It

is especially in cases of this kind that one sees diffused cellulitis. I have seen shock particularly severe in wounded men who have been subjected to prolonged bombardment, or who have been worn out by the effects of an attack carried out without shelter. It has generally been more marked among officers than among men. The shock seems to be, to a certain extent, proportionate to the nervous strain which accompanied a too violent effort. It is not impossible that the mental injury may react, perhaps, upon the cerebral centers like the nerve injury which affects the cortical cells and which has been described by Crile.

These multiple wounds with shock have been rendered more severe by the delay caused by the circumstances of war, and in wounds of this kind the very character of the injury imperiously demands treatment without postponement. Such delay, in fact, has often been the cause of the complications we have seen; that is, gangrene, tetanus and septic infection caused by foreign bodies, such as fragments of clothing and dirt which are carried in by the fragments of shell. Then, we have there a new situation which earlier wars did not produce, not even the last Balkan War, because at first the wounds of this character were only 7 % and later, not more than 35 %. You will immediately understand that, on the one hand, under these conditions the first aid dressing packet which every one carries in his kit is not of much value, and that, on the other hand, the dressing and care which can be given by the male nurses and stretcher-bearers, charged with first aid on the field of battle, is far from being sufficient. Therefore, these last were forced in the beginning of the war, in order to remedy this defect, to transport the wounded as rapidly as possible to regimental first aid dressing stations. Many physicians and regimental ambulance attendants and stretcher-bearers, hearing the voice of duty and thinking of nothing but the interests of the wounded, rendered prodigious service, and in doing this paid for their devotion with their lives. I pay them, in this place, a warm tribute and salute them with emotion.

Undoubtedly, in the first aid dressing stations to which the wounded were brought speedily back to better supplies and equipment, dressings could be made with more care and treatment carried out in more complete fashion. But, the hour of retreat from Belgium struck, and it was necessary to proceed rapidly, and in consideration of the awful number of cases, it was possible to apply only the simplest dressing, which consisted in the simple closure of the wound, and a preliminary disinfection with a few drops of tincture of iodin. It was also necessary for military reasons to clear the advanced zone of wounded as soon as possible. This was only humane, seeing that they were dealing with an enemy reputed to be so cruel. Therefore, the greatest diligence was exercised at the first aid dressing stations to transport the wounded to the field hospitals by means of stretcher-bearers. There a systematic disinfection could be made of the wounds, which were usually soiled and infected, and operative interference could be practised. And these field hospitals, like the first aid dressing stations, constitute a link of the advanced zone in the Sanitary Service. It was thus necessary that they precede the Army in its retreating movement, and instead of being able immediately to treat the wounds with wet dressings, irrigation and antiseptic baths, which are necessary because of the great number of wounded and the character of the wounds, only the simplest dressings could be employed, and while many of these were transported to the hospitals in the rear, those who could not be transported quickly enough fell into the hands of the enemy, with their wounded. On the other hand, the sanitary trains were insufficient to meet the demands, in spite of all the preparations which had been made, and we have been obliged to transport many of the wounded in vehicles absolutely unsuitable for this purpose. It was for this reason that so often a large number of wounded, already infected, were sent to the rear, and since military necessities often require the shipment of wounded for very long distances and over a period of several days, there is no cause for astonishment that the base hospitals in the rear, at the beginning of the war, show so many wounds complicated with infection, both local and general.

These are the reasons why there was so much indignation and criticism, both

within the profession and among the laity behind the lines, the echoes of which came back even to the advanced lines. There were even rumors that the Sanitary Service had failed, but those who criticised did not know the conditions prevailing in the zone of combat. They did not know the difficulties under which the wounded had to be cared for before they reached the rear, and the trials of the chiefs of the field hospitals, whose units were often overwhelmed in a few hours by four or five hundred wounded, under the prevailing conditions. It is necessary to have seen the pitiable condition in which the wounded soldiers, sent from the battle field, ordinarily arrived in the field hospitals, to appreciate the real conditions. For a long period they have had neither time nor opportunity to groom themselves or to keep their bodies clean. They arrived with their tunics and trousers covered with soil, their shoes covered with mud, with long hair, their faces and hands black with sunburn and smoke, their skin so hard that it could not be easily washed, and sometimes infected by lice, and with these conditions it was necessary, above all, to dress them and move them along in order to save them from the enemy, or even simply to make room for those who came after.

I have lived through these most difficult and tragic hours, from the battle of Charlevoix, where the retreat began with all its terrible consequences, to the battle of the Marne, where it ended—the battle of the Marne, one of the greatest works of French genius, and where the glory of the French Army and its chief, Marshal Joffre, reached its highest point.

From that time on the aspect of advance changed. The war movement was succeeded by a stationary war. The Sanitary Service, in spite of its heavy losses in personnel and material, was able to functionate more usefully. Now, the Sanitary Service can be organized with stationary physicians who are really in better position to meet emergencies. The men are favorably situated and more accessible to the regimental dressing stations, and the wounded are now transported after their wounds have been more carefully dressed, without hurry, by the divisional stretcher-bearers to the field hospitals. On the other hand, these field hospitals are now served by the sanitary automobiles which are attached to the Army corps. These automobiles are used, at first, to transport slightly wounded to neighboring dressing stations, where they can be treated for a few days and cured; second, to transport the more seriously wounded after they have been dressed and warmed, so that a journey can be undertaken, without risk, to the railroad station, where they can be transported to the hospital in the rear; finally, these automobiles carry the very seriously wounded directly to the surgical hospitals of the Army corps, which are in close proximity. The services of such motor cars make it possible for us to hope that we may realize the ideal, which consists in treating, as soon as possible, those who are gravely wounded and to whom long transportation would mean great danger. Nevertheless, in order to further improve the Sanitary Service and profit fully by the experiences of the past, one has attempted to bring certain additional changes in the organization as follows:

At first the regimental medical personnel, because of the necessity for constant service and in consideration of the losses to which it is exposed, has been reinforced. The effective strength of the medical personnel has been augmented, and the number is now nine instead of seven, as it was before. As to the equipment, except for the four-wheeled carriage placed at its disposal, the regiments possessed no satisfactory means of transportation except the stretchers, which were insufficient and often of extremely small capacity. For this reason they have been furnished with stretcher wheel-barrows, which have rendered the greatest service, and six of such wheel-barrows have been given to the regiments. In addition to this a large four-wheeled carriage has been permanently assigned to each regiment, and not simply placed at its disposal every day.

Second, the group of divisional stretcher-bearers, those who carry the wounded from the dressing stations to the field hospital, and who have most efficiently cooperated in the transportation of the wounded, and have fully demonstrated their importance in the course of the campaign, have been reinforced both in attendants and cars, as they now have

twenty attendants and two two-wheeled cars have been added to this group. The four-wheeled vehicles have, in most cases, been replaced by two-wheeled cars.

Third, the Sanitary Automobile Sections of the Army corps have rendered the greatest service and have made a place for themselves in the Army. They are used for the transportation of the wounded, in some instances, from the very limit permitted by tactical conditions to the field hospitals, often to the evacuation hospitals, to the stationary hospitals, or to the central base hospitals. They can take the wounded directly from the dressing stations to the rear with a surprisingly slight delay.

In spite of this, in consequence of the great enlargement which has been necessary in the central hospitals, the capacity of the transportation service has been proved to be insufficient, and one has been forced to increase the transportation capacity of the Army corps sanitary section; and further than this, they have been divided into three parts. The sanitary section of the Army corps has been organized in three divisions of ten ambulances each, a total of thirty ambulances, with a capacity of 180 lying down and 240 sitting up. In addition to these motor trucks for the transportation of the stretcher wheelbarrows, two small motor trucks for dressing materials, two cars, one for the commanding officer of the sanitary section and one for the adjutant, have also been provided. There has been put at the disposal of the Chief Medical Officer an automobile, which enables him to prepare for urgent emergencies, either during the course of battle or during the period of intermission.

It is clear, then, that there is constant attention paid to the Sanitary Service in order to procure conditions of the greatest speed for the relief of the wounded, and particularly in order to convey the seriously wounded as comfortably and rapidly as possible to shelter, out of the danger zone, away from the advance of battle and from the heavy artillery fire. The plan is to carry them out to the evacuation hospitals, or even, if possible, take them to the base hospitals which have been established within the zone of action, where they will find conditions for treatment of wounds which will contribute to cure slight mutilation and prevent permanent mutilations and, in many cases, save men's lives.

It is for similar purposes that, in spite of the very efficient field hospitals adopted by the regulations of the Sanitary Service in 1910, we have utilized the surgical automobile ambulances. This is an ambulance which can be rapidly transported to any point, and which has been equipped especially for emergency surgery for the seriously wounded. It is furnished with its own necessary appurtenances for sterilizing dressings and instruments and is accompanied by a hospital section sufficiently equipped to put the wounded to bed and keep them warm. Its personnel is transported by automobiles. This type of surgical ambulance is known as the Gosset type, named for one of our prominent surgeons. The first one left France in November, 1914. During a period of battle the wounded are carried in night and day, and while it is necessary to work rapidly in order to save the maximum of life and limb, it is necessary to have within four miles of the front line an equipment such that the bandages and supplies and the trained persons will be available at all times. For this purpose the surgical automobile ambulances, operating in squads, were organized, consisting of surgeons and anesthetists, each one being on duty for eight consecutive hours in the following way: squads Nos. 1 and 2 from 4:00 A. M. to 12:00 M.; squads Nos. 3 and 4 from 12:00 M. to 8:00 P. M.; squads Nos. 1 and 2 from 8:00 P. M. to 4:00 A. M. Each squad, in this way, has twelve hours' rest in twenty-four hours; sixteen hours one day and eight hours the next. It is unquestionable that the sanitary ambulances constitute one of the greatest additions to our methods of caring for the severely wounded.

In spite of all this it can not be said that this organization has been brought to perfection. The solution of the problem is to so organize the service that the surgeon can get to the severely wounded with the smallest loss of time rather than to bring the severely wounded to the surgeon. As a matter of fact, the severely wounded who come to the surgical ambulances very often suffer from shock and, especially, if they have been wounded sometimes four or five hours, and even as

high as ten to twenty hours beforehand, and to transport them more quickly has usually been difficult and almost impossible. It has been necessary for them to be taken across bridges on stretchers, and over roads which have been torn and plowed by shells. Then they have been carried in light vehicles where they have been terribly shaken up, and finally, by the sanitary automobile, in which their suffering has not been much less. The sanitary automobile thus is forced to proceed rapidly, because often these roads, although torn by shell holes, are under the fire of the enemy, and the drivers have often been killed trying to get the wounded to shelter. One sees them arriving at the field hospitals in the most serious condition; sometimes they die before anything can be done, succumbing to infection even when there has been no serious injury. The great necessity, therefore, is to do everything possible to shorten the transportation and, consequently, the prevention of infection of wounds. Concerning the prevention of infection of wounds, the idea which has been suggested by the Japanese, that is, to give clean clothing to the troops just before an assault, has been difficult to carry out.

It has been suggested also to give every man a small ampule of tincture of iodin. This would be a good idea, but that ampule of tincture of iodin is sufficient only for a single wound, and does not fulfill the needs of the present condition for that reason. The most efficient method is the one now in use, namely, to establish first aid dressing stations very close to the point of battle, and supply them with physicians capable of carrying out efficient dressings. Such stations have become even more necessary since the enemy has made use of the terrible asphyxiating gas. Under these circumstances these measures must be very prompt and must be given to a large number at the same time, and must be given at the place where the asphyxiation occurs, for the proposition of asphyxiated men is extremely dangerous. For that reason large, warm chambers, free of dust, have been established in the dressing stations where such cases can be treated by inhalations of oxygen, fumes of eucalyptol and menthol and injections of caffein. All these cases should be treated at these stations where they will not come in contact with pulmonary diseases with which they might be infected.

But how has it been made possible to furnish surgical attention for the severely wounded without subjecting them to prolonged transportation? This question has been answered by the establishment of similar subterranean surgical stations, which have been completely equipped for surgical work like those described above, and where they can give the severely wounded the aid that they require within two hours after the injury. The bacteriologists claim that these infections must be attended to within six hours after the wound has been sustained in order to have any effect. With this conception, therefore, such a station is composed of a number of subterranean rooms eighteen or twenty feet in length, where arrangements have been made for giving injections of antitoxins and serums, and where wounds can be treated after operation. These rooms are heated, they have an electric power station, a sterilizing room, a wash room, a kitchen, and so forth. As to the personnel, its composition is similar to that of the surgical automobile ambulance. The surgeons or groups of surgeons are arranged according to the specialties,—fracture wounds, wounds of the chest or abdomen. In consequence, they have developed a speed which rapidly becomes considerable, and they are aided by squads of assistants and nurses, who become equally specialized, and under the instruction of the surgeons often become extremely skillful in their manipulations. Every surgical unit of this kind costs about $20,000. By this arrangement cases with hemorrhage have often arrived in time to be saved, when a slight prolongation of the bleeding might have led to death. In many cases of injury to blood vessels, the surgeon has been able to put in a ligature in time to secure a successful result.

Further than this, although close to the front, the arrangement of the surgical dressing station has given a feeling of security and safety to the men, which is a very important element for success. The psychological conditions in these circumstances must not be underestimated. The men, while in battle, are heroes; they face the most terrible perils, which one could imagine, with the bravery of sol-

diers; but, after they are wounded they are like children, in need of a mother. When they are safely in bed they get excited and anxious at the slightest sound that resembles the whistling of a shell, or at the smallest explosion in the neighborhood. They have to be quieted and treated like children. So the moral shock is present, added to the condition of physical shock. But, put them in one of these warm subterranean rooms, where they are sheltered and have a sense of security, and their faces change from excitement to serenity; they want to be cured and they think of nothing but cure. Under these conditions the surgeon can attain success.

Such are the conditions which have been carried out in the organization of the French Sanitary Service in the advance zone. As to the organization of the service in the rear, the latest regulations, which were issued in October, 1916, are based on the highest conditions of security under which the sick and wounded can be easily observed and then delivered to the hospital zone. As far as the hospitals of the interior are concerned, there is nothing more to be desired from the point of view of organization, whether in dealing with the military hospital or with the auxiliary hospital. These are served by a personnel of undaunted devotion, the sole ambition of which is to preserve the French people. Not only is it the intention of these institutions to preserve life, but also to seek, by all possible means, to assure a useful occupation for those whose limbs have been lost or mutilated. This is the province of the re-education centres.

And, so, the Sanitary Service plays a most important role in this territorial war. It is using all possible inventions of genius for saving the life and repairing the injury. There are perhaps more heroic roles, but there is none more worthy of self-sacrifice and devotion. This has been done not only in the French Army, but by the British Army as well, for which, let me say in passing, that the French people, and especially the French Army, have a great admiration. And this the Sanitary Service of the American Army will have in a very short time. I have had proof of this in the numerous efforts I have witnessed since I have been in this lovely and generous country. I have visited several camps, and in each one of them I have been impressed, more than I can say, by the fitness of the medical personnel and its enthusiasm for foreign service, and also by the perfection of the material. I am glad to seize this opportunity to express to General Gorgas, who gave such splendid encouragement to all who worked under his command, my appreciation and to wish him the greatest success.

NEEDS OF THE MEDICAL SERVICE*

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At the 1916 meeting of the Southern Medical Association, in Atlanta, I had the privilege of reading before the Surgical Section of the Association a paper on "The Relation of the Medical Profession to Medical Preparedness." The closing paragraph was to the effect that "on the medical profession rests a heavy responsibility, for with the medical profession rests the subject of medical preparedness." The country was then at peace; there was but an academic interest in the question; the profession was not awake, nor was the need of the hour apparent to the Nation until war became inevitable. The Reserve Corps, first organized in 1908, languished year after year until in November, 1916, there were but 2,026 officers in the Corps and 657 additional approved applications, a total of 2,683 actual and prospective medical officers. Included in this total were the physically unfit and those over the military age; transferred from the old organization to the present Corps without examination. These 2,683 Medical Reserve officers, if all were physically fit, were sufficient for an army in the field of only 268,300 fighting men, and this in the day of armies numbering millions. The Medical Department circularized the profession, appealed through the medical and lay press, and its officers addressed meetings

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of medical men, but there was not that response to these appeals that we so earnestly wished. The fault was probably with us rather than with the profession. Late in January and in February of this year it became evident that the country would inevitably be drawn into the war. The profession realized this at once and the response has been generous.

Today there have been recommended for commission 17,653 qualified practitioners. Of these, 1,251 have declined to accept; 228 have been discharged from the service; 1,621 have neither accepted nor declined; and 14,533 have accepted and are available for assignment, a number sufficient for an army of 1,500,000 men in the field. One may say that with this number of medical officers, about equal to the total practitioners in the State of New York, that the service is amply equipped for any demand that may be made upon the Department. This is not the fact—for in war we need medical officers, more medical officers, and yet more. The minimum should not be less than ten medical officers for each thousand men under arms; and in addition we should have available an unlimited Reserve. We not only must provide for medical officers with all tactical units, but must supply ambulance service, field, and evacuation hospitals, hospital trains, base hospitals, hospital ships, convalescent, and general hospitals; and now is introduced a new type of hospital, that for the reconstruction of the wounded, the rebuilding of men, a work that requires time and skill, the combined patience and the co-operation of both the man and the surgeon. We must reeducate the reconstructed so that they will be able to earn a livelihood. This is a duty that the Government owes its soldiers and a duty that can be fulfilled only through the help and co-operation of the medical profession. This rebuilding of men has more than an economical side; there are the sociological and political sides that must be considered. We can no longer feel that the Government has fulfilled its obligation when a man's life is saved; we must place the individual in such physical condition that he can become a producer. To accomplish this we must give the best that the profession has in order that when the war is over and social and political conditions are again normal, each of those who has been wrecked by war and rebuilt by your skill will feel that in his case the Government has done its full duty; that he has received the best that the profession could give; that there was no want of sympathy, no neglect; that everything humanly possible was done to make him a useful, productive member of the body politic. Failure to meet these requirements will develop unrest and resentment against the Government that may be far-reaching in its effect.

We may dream dreams of an Utopian service, but only by the co-operation of the profession can such dreams be realized. We have such an abiding faith in the profession, its skill, its willingness to give, in its ideals of duty and in its patriotism, as to believe that the highest hopes will be realized, and when the war is ended the profession will be accorded its rightful share of credit for a success not only on the field of battle, but credit for a far more brilliant success, the salvage of men. It will be asked how can this be done? It can be done by having at the command of the Department an adequate medical service. An adequate medical service does not merely mean a sufficient number of medical officers to fill certain definite positions authorized by the Tables of Organization; it means the mobilization of the medical profession of the country, the selection of the one man in the profession for the one particular place that that man is best qualified to fill, and by that I do not mean the qualification is to be determined by any individual, but the selection is to be made by men of the profession who sit in judgment. For this we now have in the office of the Surgeon-General many of the distinguished men of the country, each in charge of or associated with some particular branch of this work. These specialists will select and recommend to the Surgeon-General the man most fitted for a particular duty. This work is hampered because of the fact that we have as yet been unable to mobilize the entire profession. We should commission in the Reserve every man of the profession in the United States who is a graduate of a well-recognized medical school, and is physically, mentally, and morally qualified. Today but 10 % of the profession is available for assignment. Many of these officers are among the most dis-

tinguished in the profession, but their number is too few to permit the selecting of the one man for the one particular place that could be best filled by that man. The profession has given, but it must give more, and yet more. It must be mobilized—not as individuals but as a whole; otherwise the best results can not be accomplished. So it is just as true today as a year ago that "on the medical profession rests a heavy responsibility, for with the profession rests the subject of medical preparedness."

The question naturally arises, with the relatively large number of officers in the Medical Reserve Corps, to say nothing of the Medical Corps of the Army and the National Guard, what have you done to make the best use of the material on hand? You have 531 medical officers in the regular service and 1,460 in the National Guard in addition to the 14,553 Reserve officers. Here is a total of 16,544 medical officers. Why more? These are fair questions. We have organized training camps for officers and enlisted men, trained 9,000 Reserve officers in these camps, divided them into regimental sanitary units, organized sanitary trains, supplied the staffs for base and general hospitals, created laboratory sections, operating units (not a part of the staffs of base and general hospitals), selected the personnel for the reconstruction hospitals and assigned them for special training in their professional duties in both the United States and with the armies overseas, and have filled requisitions for medical officers from some of our allies. In this way we have today more than 12,000 Reserve officers on active duty. Of the 2,000 officers remaining on the inactive list a number are far above the age limit for military service, having been transferred from the old Medical Reserve Corps; others are teachers in medical schools and can not be assigned to duty without manifest injury to the future of the profession, and some are practitioners in rural communities who can not be called into the service without depriving these communities of medical aid. While the number of medical officers is sufficient for today, what of tomorrow? Without additional medical officers what of the great number of reconstruction, base and general hospitals that must be created, the staffs of which must be the best the profession can give? What of the demands that will inevitably be made on this country for medical aid? These demands can not be met unless the profession is mobilized as a profession, and it will be the duty of the profession so to mobilize. It is the duty of the profession to teach the people of the country that an adequate medical service, a service not only adequate in numbers but adequate in skilled specialists, is an economic factor in war of the first importance. An adequate medical service means the salvage of men—the saving to the country of thousands of lives that otherwise would be uselessly sacrificed. It means making whole the wounded, lowering the incidents of disease and the death rate from sickness. An adequate Medical Corps means the profession, and by this I mean the voluntary offering of itself as a profession, saying to the Government, "take from our number the man most fitted for the special duty to be performed."

What preparation is being made? There is much that can not be told, but preparations on a vast scale are under way. Hospitals of from 500 to 1,000 beds have been erected at National Guard and National Army cantonments, thirty-two in number. General hospitals have been established, as have hospitals at the ports of embarkation. Camps in which are more than 1,000,000 men have been made healthy. By co-operation with the civil authorities extra cantonment areas have been cleaned and are now moral as well as healthy, supply depots established, and requisitions for medical supplies have been promptly filled.

The hospitals have been manned and equipped, and the chiefs of service are men of more than local reputation. In brief, the Department has so far met every demand. But as to the future, the hospitals so far established are but few in comparison to the number that will be demanded. We must establish and maintain a double system of hospitals, one for the care of the sick and wounded in Europe and the other for service in this country. It is not our policy to return *all* sick or wounded to the United States, but to bring only those who can not be returned to their organizations within a reasonable time. To do otherwise would be a hazardous practice, requiring the running of the

"U-boat" gauntlet three times instead of once. It would also result in that curse of all armies, military absenteeism.

The hospitals in this country will be of two general types, convalescent and reconstructive, while in Europe we will maintain the most extensive hospital system that this country has ever established; equipped with *all* necessary appliances, and with professional staffs as skilled as any in our civil hospitals. This can be done with credit if we can mobilize the profession; we can then utilize it to the best advantage and without working a hardship upon the civil population, the needs of the city and rural community being safeguarded.

War is the most fearful thing that can come to a people. But its horrors can be lessened by an adequate medical service. The knowledge that a medical service chosen from the profession, a voluntary draft, the giving by the profession of its best without reservation or stint, will be a comfort to those at home and a tower of strength to the soldier who knows that, sick or wounded, the best brains and skill of the profession will be devoted to his care. This is the kind of service we want and the service we must have.

What of the profession in the South? It must be understood that no section with few cities, many small towns, and with a large rural population, can give in the same ratio as populous cities. But, measured by its ability to give, the South has given liberally.

For example, with but 10 % of the profession in the Reserve Corps, Florida has given 16 % of her qualified practitioners.

COMMISSIONS IN M.R.C. RECOMMENDED BY SURGEON-GENERAL

States	Med. Pop.	Nov. 1	%
North Carolina	2,102	309	14.7
Kentucky	3,584	514	14.3
Alabama	2,658	285	11.1
Louisiana	2,060	229	11.1
Texas	6,240	695	11.1
West Virginia	1,729	190	10.9
Mississippi	2,048	223	10.8
South Carolina	1,399	147	10.5
Virginia	2,547	268	10.5
Oklahoma	2,634	272	10.3
Georgia	3,421	346	10.1
Tennessee	3,457	308	8.9
Arkansas	2,637	158	6.0

And by cities Memphis is first with 23.3 % of her medical men in the Medical Reserve Corps. Other cities are as follows:

Cities	Med. Pop.	Nov. 1.	%
San Antonio	234	47	20.1
Baltimore, Md.	1,348	257	19.0
Richmond, Va.	330	61	18.4
Nashville, Tenn.	344	63	18.3
Birmingham, Ala.	303	53	17.5
Atlanta, Ga.	553	85	15.4
Dallas, Tex.	312	48	15.4
New Orleans, La.	630	97	15.4
Louisville, Ky.	626	86	13.7

These percentages are based upon the total number of registered practioners in each state or city. As generous as these percentages are, the offering must be greater. The Government must be able to select the man for the place, and when that man's services are needed they must be available. This is not the time to say "I will be glad to accept a commission as a Major if I can be guaranteed I will not be required to serve away from my home town," a remark which has been made by a few. As the Department can not guarantee that the war will be fought in that particular neighborhood, the offer of service can not be accepted.

This war is the most atrocious ever waged, but for us a necessary war, a war that will require the co-ordinated efforts of the allied nations to win. To lose means a world in arms for generations with the daily menace of other wars.

The sacrifice of life has been enormous; how great no man can tell. Now we are taking up our burden of war and must like men bear this burden until the end. You of the profession can lessen the horrors of war, can lend comfort to the minds of the families of the soldiers by offering your services, by being enrolled in the Reserve and standing ready to respond to a call for service. This war will tax the Nation's resources to the uttermost and the profession is one of its greatest resources. The medical service is the great conserving agency of war, and without the full and voluntary co-operation of the profession the ultimate benefits of this great agency can not be had. The country needs you, possibly not today, but tomorrow; so today put your services at the disposition of the Government for the morrow. For it is as true today as in the past that medical preparedness rests with the profession, not as individuals but as a whole. The time is now.

THE PROPER ORGANIZATION OF THE MEDICAL PROFESSION OF THE NATION AT WAR, WITH MOVING PICTURES*

By W. O. Owen, M.D.,
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To believe the song of failures,
In a land where good men have won,
Is casting your lot with losers,
And doing what they have done.

To listen and learn from winners
In winning yourself their stake.
You need not fear the advice you hear,
But beware whose advice you take.

In the popular conception, the civilian doctor is a prototype of the army doctor. The functions of the one are the functions of the other; the only difference is the uniform, and in the "purling times of peace" gold buttons and gilt lace give the army medical man just a shade or two the advantage in looks, in the opinion of some who do not look below the surface; while his official duties place him somewhat at a disadvantage professionally and financially.

We are accustomed to the routine of the doctor's functions and work. When we feel out of sorts, we call at his office; when we feel worse, he calls on us. It matters not much either way; he asks us questions, looks at our tongue, feels our pulse, thumps us over, and does several other things that may occur to him to be useful to find out why the machine is not running as usual. In most cases, he advises about our food; advises rest if we have been working; working a bit if we have been resting; gives us some other good advice, or what is intended to be such; writes a prescription for the druggist, shakes hands, smiles, and is gone, with a promise to call again if all does not go well. Or, maybe, he finds that something has to be operated upon. If so, he sends us to the hospital, and there with the hospital staff of white-coated interns, blue-frocked nurses and well-ordered house service, we go through the ordeal of the operation.

In this we have seen the doctor simply as an advisor, or one giving instructions to others who assume the responsibility of carrying these instructions into effect. Nowhere do we see the doctor called upon to do not only his own professional work of finding out what is the matter with us and advising us, but also himself to assume the responsibility of every detail incident to carrying his instructions and treatment into effect. In our own households we provide what the doctor orders, whether it be nurses, food, medicine, heat, light, or what not. The doctor does little more, personally, than to advise. In the hospital the same is the case except in surgical operations where, of course, the doctor's personal work reaches its acme in importance and skill. All else the hotel-for-the-sick attends to. The hotel-for-the-sick organization, complex and exacting, is no concern of the doctor. The doctor's solicitude does not extend to the administration of the hospital farther than to be assured that what he orders will be executed with fidelity and thoroughness. It is this conception of the doctor and of his functions and duties that we carry with us when we begin to think of the doctor's work in the army in war.

The medical soldier is not a doctor only. He not only gives medical advice, but he clothes, feeds, houses and looks after the sick and wounded, and he has also to free the command from the sick and wounded. In all these battle pictures which are shown to you in this good day, the medical soldier is present and bringing the sick and wounded through this turmoil of war to some point of comparative shelter, for be it known that the fighting soldier is not allowed to turn his back to the enemy to help his wounded comrade from the field. This is the function of the medical soldier, and he is there.

In times of peace, the routine of the doctor in civil life and the doctor in army life run a fair parallel. In peace, in both civil and army life, the doctor waits till he is summoned by the injured or the sick. These must look for the doctor. They must hunt him up. But in war, conditions change. The army doctor must now hunt the wounded and the sick. He is no

*Address, Public Session, Southern Medical Association, Eleventh Annual Meeting, Memphis, Tenn., Nov. 12-15, 1917.

longer a doctor simply, but he is now both doctor and soldier. His duties and functions have become dual. His duties as a doctor remain the same as in civil life, but his duties as a soldier assume a twofold capacity. He must now provide all the services that are provided by his patients in their own homes or in the hospital, and he must in addition provide for finding his patients on the field of battle and bringing them to the hospital, that he may attend to their wants. He must not only make every provision for the care of his patients from the smallest to the largest detail, but he must make every necessary provision for finding his patients quickly and getting them expeditiously and safely where their injuries or illnesses may be properly cared for.

Let us see what, as a soldier, the medical officer must do or cause to be done, for the medical officer can not possibly do personally everything that must be done. He must, however, exercise a comprehensive supervision and must issue the orders and instructions necessary to carry his opinions into effect.

He must see that his base hospital is equipped and properly organized for the service it will have to render; that there are enough nurses, orderlies, clerks, office and ward assistants; that there are ample beds and bedding; that there is a sufficient stock of medicines and surgical supplies, utensils for cooking, and a sufficient food supply; that the evacuation hospital has proper transportation and that the field hospitals and ambulance companies are fully equipped, etc.

It may not fall to the lot of every medical officer in war to discharge all the functions that I have briefly sketched; some may do only administrative work; some may do purely medical work, just as in private life; but all must be prepared to do whatever the exigency demands.

In order that my purpose may be clearly understood by you, it must be borne in mind that this war is not a war between contending armies, but is a war which involves the entire Nation, not merely that part of the Nation that is created into armies and navies, but it involves the entire industrial life of the Nation. Each man and each individual will have to bear his part in it, and it is probable, I think, that all future wars will be of the same character.

Great Britain has at the present moment been notified by the War Emergency Committee of the Medical Profession of the British Empire that it is impossible to furnish any more medical men without causing civilian communities to suffer for lack of proper medical attention; that in fact the entire supply has been cut off. France is but little better off than England. I have not been able to follow the Russian nor the Italian fronts, nor do I know the conditions in Germany. I strongly suspect that they are no better. France has found that she needs with the Army at least ten medical officers per thousand men, and a second ten medical officers per thousand whose qualifications are not quite equal to those of the first ten. I understand that Great Britain is far short of this supply, having only 12,000 medical men in the Army. There were, in 1914, in the British Isles about 33,000 medical men in all.

You will therefore see that in all human probability, if this war continues for any length of time, you will be called upon to supply from your numbers at least ten per thousand and perhaps more. The Army can not utilize men of inferior grade. It wants nothing but the best. The Secretary of War has announced that he will need more than 2,000,000 men. The present law so far as the Regular Service is concerned calls for seven per thousand. It is well known that the Surgeon-General testified in 1915-16 before the House Military Committee that in case of war he would need at least ten per thousand. Let us calculate on the basis of seven per thousand—2,000,000 men will call for 14,000 medical men. These men are to be examined to determine that they are professionally and physically sound before they can be accepted. These men are to be volunteers. The draft law catches only those who are below thirty-one years of age, and not all of them.

There are altogether in the United States, roughly speaking, 140,000 medical men and women. If we are to take 14,000 of our numbers for the maelstrom of war, what is to be the effect upon the civilian population? For remember that these 14,000 are not your average, but they are the very cream of the profession, the most

active men that you have, the most intelligent men that you have. We do not knowingly take any man who is not physically and mentally well above the average, and we examine them, 'though not so thoroughly as we would like to always.

Now, can we take these 14,000 of our numbers without very careful organization upon the part of the profession? It is this organization that I am here tonight to bring to your attention.

It appears that the wisest course will be for the profession to organize themselves into committees which shall work with the Medical Committee of the National Council of Defense and the Surgeon-General's office, so that there shall be a centre which may be consulted by the profession of the United States itself and legalized by Congressional action if possible, not necessarily but preferably, on whom the War Department can call for the numbers of medical men they will need for the Army, the Navy, and the Public Health. Let this Central Committee call upon the State Committee for its quota or number of registered medical men within the state. Let each have its subdivisions, but not let any state local group exceed in numbers six or seven hundred men. In these divisions each man knows the other more or less well and it can be determined with very fair accuracy what the qualification and qualities of the individual men are, and then the selecting committee, having a personal knowledge of the family of each one of the group, with the pecuniary difficulties of the individual man, his professional qualifications, etc., will be able to determine instantly and correctly where the balance lies between the necessities of the three parties to the compact.

First to be considered is the necessity of the United States for the services of the individual man.

Next, the necessities of the community for the services of the individual man.

And third, the necessities of the family dependent upon this individual man.

These three factors are co-ordinate and co-equal; they can not be considered separately; they must be considered as a whole.

No one can consider these so well nor so intelligently as those who are familiar with the necessities of the individual family, for, my brethren, I say to you that the necessities of the individual family are the necessities of the Nation. These three items can not be considered separately, but must be taken as a whole.

There should be an appeal from the decision of the local board to the state board, which should be selected by the organized profession of the state.

This, I believe, will be the greatest protection, both to the profession and the public. Were I personally allowed to write the law I would not permit any man to volunteer for any service in the Medical Department or elsewhere, outside and beyond that of the Regular Service, and the Regular Service only because it is a life-time business and it would not be just to men to compel them to make a life-time decision which might be contrary to their wishes and inclinations. The great honest heart of the profession, loyal to its ideals and true to its professions of faith, does not volunteer. It sees the necessities and its obligations to the public which have supported it, and it says to the Government at large "I am at your disposal," which is a different thing from the volunteer who says "Will you not take me? I want to serve you. I feel I can give good service." Were it possible to obtain nothing but this high-class volunteer, then all would be well. Unfortunately, there are many medical men who have not succeeded very well as professional men, making from twelve hundred to two thousand dollars per annum (I do not refer to the young man just starting out, but to the man who has been fifteen or twenty years in the work). These are the reasons why I think there should be organization.

Here are some of the reasons which will show you why it is that the medical practitioner, be he ever so good a man, be his qualifications what they may as an internist, as a surgeon, as a specialist of any class, can not do the work of a medical soldier without training. Of course, he can be trained, and when this war is over there will be returned to your ranks many men who are just as expert as the very best of us who have passed our lives in this special work. I am firmly convinced that if this war lasts as long as two or three years that every individual man in the practice of medicine in these United States, and every medical woman, will have

had many, many soldiers to care for, not as private patients, but to be cared for at the cost of these United States.

In order that you may get a clear idea of what legislation has been in this matter, and what legislation should be, it is well to go into the history of the past, and you can well imagine what General Gorgas has to face when he bears in mind that no matter what his care, no matter what his thoughtfulness,—that if he escapes censure for his conduct in the medical end of this war into which we are now entering, he will be the very first Surgeon-General that the Armies of the United States have ever had who entered into a war as a Surgeon-General and undertook to perform these duties who escaped censure; and that if he does escape this censure, he will be the second man who has escaped with his official life. Each and every Surgeon-General who has preceded him from the beginning of this Government, even in Revolutionary days, with one exception, has lost his official life.

When one considers what the legislation concerning the medical profession has been, and recalls that by far the greater part of all the laws that have been written in the history of and concerning the medical man, have been that of the regimental surgeon and his mate, this is the first war into which the United States has entered in which the regimental surgeon does not figure largely; and even in this war, the regimental surgeon still exists in the National Guard.

At first, it may interest you gentlemen to have read to you an account of the first medical examination for entrance into the Army Medical Service, by one of the participants in this examination, before a board which was appointed by virtue of the following order:

On May 8, 1775, the Provincial Congress of Massachusetts "Ordered, That the President pro tempore, Doc. Church, Doc. Taylor, Doc Hilton and Doc. Dunsmore be a committee to examine such persons as are, or may be, recommended for surgeons of the Army now forming in this colony," and they

"Resolved, That the persons recommended by the commanding officers of the several regiments be appointed as surgeons to their respective regiments, provided they appear to be duly qualified upon examination."

In Thacher's "Military Journal," 1775-1783, on pages 34-35, I find that:

"On the day appointed, the medical candidates, sixteen in number, were summoned before the board for examination. This business occupied about four hours; the subjects were anatomy, physiology, surgery and medicine. It was not long after that I was happily relieved from suspense by receiving the sanction and acceptance of the board, with some acceptable instructions relative to the faithful discharge of duty, and the humane treatment of those soldiers who may have the misfortune to require my assistance. Six of our number were privately rejected as being found unqualified. The examination was in a considerable degree close and severe, which occasioned not a little agitation in our ranks. But it was on another occasion, as I am told, that a candidate under examination was agitated into a state of perspiration and, being required to describe the mode of treatment in rheumatism, among other remedies, said that he would promote a sweat, and being asked how he would effect this with his patient, after some hesitation, he replied, 'I would have him examined by a medical committee.'"

Thacher was so fortunate as to obtain the office of Surgeon's Mate in the provincial hospital at Cambridge, the senior surgeon being Dr. John Warren, brother and pupil of the gallant General Joseph Warren, who was slain in the memorable battle on Breed's Hill.

Pretty nearly all of the history of the first eighty years of the United States is of this character.

I feel reasonably certain that General Gorgas seeks to organize the profession to such end that the various groups of specialists will work together, so that the patient may have the benefit of the expert service of all.

To take a man who has devoted eight, ten or fifteen years to the practice of one specialty, and then assign him to the examining of recruits, to put the eye man to examining hearts, and the heart man to examining eyes, means the worst service to both. To take a Public Health man who has devoted himself to the sanitary care of communities and have him run the sick call of a regiment is to waste his time and good material. Of course, either can do it and do it fairly well if he is a good medical man, but why start to work training him in a new specialty when you have work for him to do along the line to which he has devoted his life?

General Gorgas is undertaking to utilize so far as he is able the services of the stronger, better-known medical men who themselves know the specialties of the individual man and their capabilities to se-

lect the men who shall group these various men together.

There is, however, another side of this question which many of you gentlemen will have to learn, and which will be entirely new to you,—the medical soldier's end of this work.

Take the soldier's end and start not at the very bottom but with the medical officer of a regiment, leaving out the smaller detachments.

A regiment is generally officered medically by a major and one or two—perhaps more—captains or first lieutenants, depending largely upon the strength of the organization. Three officers to the thousand is about the average, so that if your organization goes up to 3,000 you will have to have at least nine officers and perhaps more. This, however, is a matter which has not yet been determined by the military authorities.

The duties of the medical officer of a regiment are to watch over the camp and see that it is sanitarily policed, to the best possible advantage, when the military necessities are considered. You must bear in mind that military necessity takes precedence over the lives of the men, for while it may cause the sacrifice of one hundred or more men in a regiment, nevertheless, it may save thousands of lives elsewhere.

You can only learn this by actual experience with troops, and while I know that this which I am now taking up is not a part of the organization of the medical profession, nevertheless, when you come to war, you will have to face it, so I can not resist the opportunity of giving it to you, for when you have joined a regiment you will find many, many things to learn.

Most important of all is to learn your relationship to your line officer companions, and you should be more than careful so to conduct yourself as to inspire their confidence, — particularly that of your commander, in your ability as a medical man and a medical soldier, as well as in your personal uprightness,—for you can not render good service, no matter what your ability as a medical man, unless you do have and do hold this confidence of your line officer companions; and, holding it, you must never forget that the commanding officer is responsible not only for the condition of the fighting unit as a fighting unit, including the health of the men, but he is also responsible for your personal conduct. You are his advisor, and when he chooses to entrust the execution of the sanitation of the command to your hands, you become his executive; you do the work for him, and not for yourself. You are his agent; he is not your agent. He is responsible, and he can not part with that responsibility, no matter how willingly he would do so.

He will receive the reward in case of success, and he will get the condemnation in case of failure. And thus it is, that since he takes the punishment as well as the reward, he must control the situation and you must not attempt to force his hand. Give him the advice, but bear in mind always that you must accept *his* directions absolutely, loyally and faithfully. Put your communications to him in writing, and let it be "yea" or let it be "nay." You have complied with your obligation only when you have learned from him that for his own reasons he is unwilling to comply with your recommendations and your advice.

It is your continuing obligation day by day to call his attention to the sanitary condition of his command. It is for him to consider the dangers which you point out to him, along with the other dangers which day by day shall threaten his command. Do not insist in pride of opinion that your advice is correct; only insist on being certain that he knows the danger and its effect upon his command, remembering always that the sanitary necessity is only one of many necessities which he has to study.

Study your commanding officer so as to know him; so that you may be able to reach him when the necessity arises; so that he may receive your advice in a kindly, friendly way, knowing that you are actuated only by the desire to be of service to him and to his command, and not to insist upon your personal belief that your own judgment is the most important.

Then again, consider what your obligations are in battle, for if you do not have the confidence of your commanding officer, he will not tell you what his battle plans are, and if he does not tell you what his battle plans are, you will have to watch developments and guess what they will be, from what has been, and do the best you may. You will not know what

he is going to do and you will not know where to place your little detachment to take the wounded off the field, because you can not tell when or where the fight will probably occur. When this is the case, and you see you are *persona non grata*, you ought to be relieved and assigned elsewhere. If the commander will not give you his confidence, then you ought to say to him, "I see that I do not have your confidence, and I therefore am unable to render to you the service to which you are entitled. I should be replaced by some other man whom you can trust." You must remember that in the position of Chief Surgeon which you have assumed here you not only have to control the movements of nearly one thousand men who look to you for every movement of their lives, but you must know that the moment a man becomes sick or wounded you take the control of him away from his company commander and assume it yourself for and in the name of the common commander of you both; that when these men are under you, their discipline and everything else is in your hands. You have to feed, clothe, transport, house and do everything else that pertains to their living, and when you get into a fight you not only have to care for all your original nearly one thousand men, but if you should get the not unusual loss of 10 % of your division, that you will have 2,000 wounded in addition to the one thousand you had to start with, or nearly 3,000. You will have 2,000 of these men, more or less injured, to handle. You have with you 48 ambulances, distributed in four ambulance companies, and you have 864 beds distributed in 4 field hospitals of 216 beds each. Now, each of these organizations has its own equipment and you have to bear in mind all of this, and if the Major-General in command has chosen to entrust you with his plans, you will be informed where the fight will probably take place. You will be furnished with a copy of the terrain. You will be told what roads are to be used by the troops and the ammunition trains and what roads will probably be available for you and what the reports upon their condition are. With this knowledge you will be expected to tell the various company commanders of your field hospitals and ambulance companies just where the evacuation hospitals will be, just what roads will be available, at just what point the ambulances will be needed, where the field hospitals are to be located, where the first aid stations are, and so on. Now, then, in doing this you have got to consider the condition of the roads over which your transportation is to travel, and since the company commander can not be informed on these points, you must convey it in your orders to them as to what they are to do. This makes rather a difficult picture for an untrained man.

What would be your confusion of thought if, instead of the success which the general had planned, you found yourself in retreat and had unexpectedly to recast your whole plan in order to protect your wounded and get them to safety, and do it under fire?

I have outlined thus hurriedly two things: the organization of the profession as a whole so that they may promptly and intelligently select the men who shall be sent to the assistance of the fighting forces in such a way as shall be of advantage to the greatest need of the United States as a whole, the local community as a whole, and shall conserve the interests of the individual man so far as may be possible.

I have thus hurriedly sketched in for you what your relationships are when you shall have joined us in our work and in our specialty of medicine, for the medical officer of an army is one of the specialties of medicine quite as much so as those of the eye or the ear or any other part of the body.

There yet remains for me one other item which I think myself obligated to invite to your attention. It does, indeed, seem to me that this great profession of ours should now be seriously thinking of the method whereby it is to assume the acknowledged leadership in medicine in this great world of ours.

Ever bear in mind, my brethren, that the profession of medicine so far as its teaching forces are concerned, in European countries, has already been practically destroyed by this war. Ever bear in mind that the military authorities of the European countries made the mistake, which our own people at first followed, in the failure to exempt the medical students from the draft and continue them at their studies. They have recanted on this point

and are now doing the best that they may to correct their unfortunate error.

When this war shall have passed, the profession in America will be called upon to supply a larger number than ever before of medical men for the entire world, and now is the time to make adequate preparation for this task which we will have to assume whether we will or not. No man willingly yields the palm of leadership to another, be he never so humble, never so self-sacrificing, for man loves his own position in the full light of the sun. Why, then, may we not place ourselves in the spotlight, in the full glory of the sun, where all may see us and all may know that we are competent?

We, individually, can not go to the European battle fields and collect material which is so profuse there at this moment, nor can we individually collect the actual histories connected with the pathological material which we may find, but this material can be collected by united effort, under the direction and supervision of the United States Government, and when this united effort shall take place, the moving picture history of each case, where it is possible to obtain it, should at the same time be secured.

There should be some central collection agency and central distribution point, where this material may all be gathered, and from which it may all be distributed. Such a point I believe exists in the Army Medical Museum and Library of the Surgeon-General's office. We have already at this point quite a large collection of medical museum material, the largest medical library in the world, indexed and available for use by the profession, which can serve as a nucleus for this purpose, and if it shall be that I may be able to see a group of men, properly authorized and instructed, sent to Europe for the collection of this material, why may we not have one of the greatest medical centres on the earth right here in this great country of our own? Why not place it in the Capital of this great Nation of ours, where it may be available for all who come properly vouched for as to their ability properly to apply and utilize it, where study rooms and instruments may be provided at National expense for the National good; where the study of medicine may be advanced by leaps and bounds; where he who would may come and study and where the greatest collection of pathological material and medical literature that the world has ever known may be rapidly accumulated; where man may work side by side with his brother; where he may tell his brother what he is doing and what he hopes to do, and receive loyal, honest advice, and never a thought nor an ideal taken from him; where each may help the other, and none may lead the others?

The great difference between civil life and military life is not in the principles of surgery and medicine, but in the application of these principles to the environment in which we happen to find ourselves. Your environment is more or less of a fixed nature,—ours change almost every day of our lives,—and certainly in every campaign. It is never twice the same, and we make mistakes, but we likewise sometimes have our successes, due to our environment and not to any special virtue on our part. Hence military medicine has to its credit the first studies upon the gastric fistula, by a United States Army surgeon; the discovery of the plasmodium malaries by Lavaran, a French military surgeon; the working out of the life history of the parasite in the mosquito, by Ross, a British Medical Officer; the discovery of the method of control of yellow fever by Walter Reed, an American Medical Officer; and numerous other things due entirely to the fact of our environment and our necessities.

If the medical officers of these United States Armies shall be able during this war so to influence by their advice the commanding officers of the troops of the United States that it will bear this fruit, that these men who have gone down to the war shall upon their return to home and community be in better mental and physical shape than when they entered this war. If they shall so advise, and shall so control the situation that the men who go down to war shall return in no worse mental nor physical condition than they entered into it, the medical profession of the world will have rendered a greater service than any other set of living men have done at any time in the world's history.

I hope and pray that we may be able to do this, with your good help.

TUBERCULOSIS IN THE ARMY*

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Tuberculosis, of all chronic diseases, is the one in which there is the greatest popular interest. How are we to explain this fact? It will not suffice to say that the high mortality is the cause. Apoplexy and cancer also have a high mortality, but the people do not interest themselves to form societies for the suppression of these diseases. It can not be the high mortality, furthermore, because fifty years ago, when consumption caused a much higher mortality than it does now, the laity concerned themselves very little with efforts to remedy the situation.

There are two factors which contributed to awake interest in tuberculosis: first, the discovery of its cause; and, second, the belief that the disease was preventable and curable, which developed as the result partly of experience with the hygienic treatment, and partly because its cause had become known. The disease being known to be infectious, new responsibility fell upon the shoulders of those who cared for the health of the community, and a new hope sprang up in the hearts of the benevolent. Consumption stood out as the one chronic disease for which something could be done. Hence, when the outbreak of war aroused in every generous heart the desire to help, it was most natural that the thoughts of many turned to the question of safeguarding the new army against tuberculosis.

The need of such action was made more apparent by the disquieting reports of the tuberculosis situation in France. The uneasiness of the people was made known by numerous letters addressed to the War Department that voiced the fears and extended the suggestions of a multitude of individuals, both laymen and physicians, and of various anti-tuberculosis leagues, associations, etc. Many such letters urged the necessity of re-examinations of the soldiers for tuberculosis by specialists, with a view to eliminating all those who bear in their bodies the slightest trace of tuberculosis taint. Suggestions of this kind imply a doubt of the thoroughness of the regular examinations of the recruit.

How far are such doubts justified? For an army like that of Germany, prepared for the offensive with infinite skill and patience through many years of study and practical experience, they would undoubtedly not be justified. It may be said that, so far as medical skill can prevent it, the German Army was free of tuberculosis when it went into the field. But in our own country, pacific to a degree, plunged most unwillingly into an unsought war, where everything connected with military operations was magnified in a night to a degree hitherto undreamed of, and where almost undue haste sought to atone for past unreadiness, it was inevitable that medical examinations, as well as many other military measures which in their nature demand deliberation, should suffer.

Recruiting at once began on a large scale and the number of applicants fairly swamped the examiners. For example, the recruiting depot at David's Island, the chief recruit depot for the vicinity of New York, had a capacity of about 500 men. Now, many days, as many as 500 new recruits presented themselves at the depot. That meant that 500 men must be examined each day, and be shipped away at once to make room for a new contingent. The minute examination of 500 men for all sorts of physical defects, including possible pulmonary disease, is no small task. There would be small wonder, therefore, if toward the end of the weary day the examiners "sized up" rather than examined the candidates. Consider, furthermore, that not all examiners are well skilled in chest examinations, and that the lungs must be examined in thronged rooms, in more or less noise and confusion; and it was to be expected that many who did not bear the evident traces of consumption, but were nevertheless affected with the disease, would escape detection.

Re-examination of the Army for tuberculosis was decided necessary by the Surgeon-General, who was supported in his view by a committee appointed by the National Association for the Study and Prevention of Tuberculosis. Primarily, of

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course, the object of such re-examination, from a military standpoint, is the promotion of the efficiency of the Army as a fighting force. It is necessary to weed out the physically incapable at the earliest possible moment, not only because the sick man is useless as a soldier and occupies space and demands attention in hospitals likely to be over-crowded, but because all in the ranks should receive adequate training; substitutes for the sick must not come in at that moment, untrained, to take the places of those who have had the training but are unable to continue on account of disease. From the financial standpoint it is evident that it is highly desirable to detect and remove from the Army those who enter it with manifest tuberculous disease before they can serve long enough to create the presumption that their disability was incurred after entrance and therefore entitles them to a pension. These considerations, then, chiefly prompted the decision of the Surgeon-General that re-examinations should be instituted. But there was also the thought for the anxious women. It was a gratification to be able to say: "The re-examinations which you demand have been decided upon. You may be assured that everything will be done that is in our power to safeguard your boys, to save the invalids and the Army from the disasters which might arise if those who are called upon to fight are unable to endure the strain."

Re-examinations having been decided upon, the question presented itself—what is the nature of the examination for soldiers; how does examination for tuberculosis in the military sense differ from such examinations in civil life? At first sight the answer would be: "Not at all; it is the same problem, a matter simply of diagnosis from physical signs, symptoms, history, sputum examination, X-ray findings." Yet, on further consideration, the problem in some respects is seen to differ very materially from that presented to the civilian examiner. In the first place, the history given by the patient can not be relied upon implicitly. The civilian physician is wont to accept his patients' statements at their face value. But it is easy to see that the soldier either wishes to remain in the service and is then tempted to conceal unpleasant facts, or he desires discharge and may exaggerate or invent symptoms. The examiner can not, therefore, consider the history in the diagnosis, except in so far as it is fully supported by objective evidence. It is the fashion nowadays to teach the desirability of diagnosticating tuberculosis by symptoms rather than by signs; at least to give much weight to slight indications of structural change in the lungs, if supported by evidence of impaired health. The patient is given the benefit of the doubt, incipient tuberculosis is diagnosticated at a stage in which it is supposed to be readily curable, and any subsequent improvement in health is ascribed to the remedial measures instituted. Such a course seems to me objectionable from a scientific point of view, but in civil life the patient alone, if any one, is harmed by it. In military practice, however, the medical officer is bound to consider the interest of the Government as much as that of the man examined. It is not permissible to make the diagnosis of tuberculosis except when the facts fully justify it, objective facts determined by physical diagnosis, by sputum examination, or by the X-ray findings. A diagnosis based upon any less substantial ground does harm to the service because it excuses men qualified to bear arms, and because it leads to the giving of pensions which are not deserved.

Such a diagnosis may do harm to the soldier as well. Some of the tuberculosis boards fell into the habit of marking various men as tuberculous suspects, retaining them in the service yet designating them as cases that will bear watching and that should be frequently re-examined. This was done on the ground of the existence of slight impairment of pulmonary resonance, or of slight changes in apical breath sounds. Such changes, always doubtful unless well marked, may not mean real evidence of past disease, especially if found at the right apex. And if they really are signs of past disease they are often only the relics of a really immunizing reaction in past years, signs of a process entirely obsolete which it is unfair to the soldier to place upon his record. As Arnold Klebs says: "Practically every one living under conditions with which we are familiar not only makes the personal acquaintance of the tubercle bacillus by coming in contact with it, but receives

lesions so distinct that years afterward they are discoverable." I hold, then, that it is unjust to the man, now manifestly in good health, to spread upon the record a notation of the existence of evidences of past slight and old, not to say uncertain, pathological changes. I hold that such a man should be given a clear record and am of the opinion that if he should unfortunately develop active tuberculosis as the result of his military service he should be considered to have incurred the disease in the line of duty and to be entitled to a pension. We desire, then, in the military service an objective diagnosis, based upon actual, well-determined facts, and for reasons already given we wish the examinations to be made quickly.

But to examine rapidly hundreds of thousands of men it is necessary to have an enormous number of experts. There was a sufficient number of experts in the country for the work without doubt, but how were they to be quickly found, assembled and put to work? Examinations had to be conducted largely at places remote from large cities. Tuberculosis specialists must be persuaded to leave their sanatoria, internists to leave their hospitals and dispensaries, and enter upon a new status under novel conditions, to give up their quiet offices and work weary hours in the noise and dust of military camps; and, what was the hardest to bear, to forsake their practice and their families at a very considerable pecuniary sacrifice. The difficulty of procuring experts was furthermore increased by the fact that the Red Cross base hospital units had absorbed many of the best men and that some of the most efficient and enterprising physicians had already obtained commissions in the Medical Reserve Corps and were undergoing training at military camps. Much valuable time was consumed in finding the examiners. Help was sought from the leading internists of the great medical centres, who responded nobly and did much work without recompense in securing competent men. The response to appeals was excellent if not so speedy as might have been desired. Boards of examiners were constituted and set at work under instructions from the Surgeon-General's office. The suggestion was made that the board of examiners should act as referees to examined cases referred to them. But this involved too much delay; there was no certainty that all of the tuberculous cases would be detected in a reasonable length of time. The decision was that all should be re-examined. The minimum number of cases for each examiner per day was fixed at 50. That means 1,500 cases per examiner for 30 working days. To examine a camp of 45,000 men in two months would require, consequently, a board of 15 examiners. Some were appalled at the magnitude of such a task. But I am glad to say that after a little practical experience those who at first shook their heads at the idea that universal re-examination was necessary, after encountering among the men of magnificent physique whom they examined a few with large manifest tuberculous lesions, became enthusiastically in favor of the idea. The minimum of 50, which seemed so large at first, was soon extended. Some boards reported that they were examining nearly 100 men per day per examiner.

First of all, the civilian training camps were examined. There were 14 camps of the first series, the majority of which contained about 2,500 men each; two had 5,000, two others 1,000 or less. In all about 29,000 men were examined. Tuberculosis was found to be present in 0.34 %. The total number of tuberculosis cases rejected was 80, or 0.275 %. Of these, two were reinstated after re-examination.

Next came the large camps of the regular Army; about 15,000 men at Chickamauga, 14,000 at Syracuse, 12,000 at Gettysburg, 12,000 at Fort Bliss, 9,000 at Fort Sam Houston; and smaller numbers, 6,000 to 3,000, in several other stations,— in all 105,431 men. The total number of cases rejected was 499 (0.463 %).

The second series of training camps numbered 24,639 men. Of these, 115 cases were recommended for discharge, or 0.465 %.

While these examinations were in progress the National Guard was ordered into the Federal service. Examiners still being too few in number and slow in qualifying for service, it was decided to examine the National Guard at their armories in the cities where a sufficient force of the Guard was present to make it worth while to constitute boards. In these examinations it was possible to utilize the services

of the large number of skilled internists who were anxious to do something, yet, on account of their health, age, teaching engagements, etc., were unable to leave their homes. Boards were quickly constituted from among the best men of the medical profession in Boston, New York, Albany and Troy, Philadelphia, Baltimore, Washington, Columbia, Cleveland, Chicago, St. Louis, Kansas City, and Los Angeles. About 61,000 men were examined by these boards. The percentage of rejections was 0.508. The total number rejected was 311.

The work of re-examination was soon extended to the National Guard camps in the Southern states where the Guard was assembling. At the present time four of the divisions have been entirely examined and the work with the remaining divisions is well advanced. The complete reports of these examinations are not yet at hand.

The great task that still remains is the re-examination of the National Army. At the present time 287 examiners in all are at work; all the National Army camps have a tuberculosis specialist as referee; and in all of them boards of examiners have been constituted, although as yet the size of the boards is insufficient in nearly all the camps. It would be premature to attempt to state the percentage of tuberculosis in the National Army at the present time, but it may be said that the percentage will be higher than in the divisions of the regular Army and of the National Guard. It is hoped that by the end of the year the great task will in the main have been accomplished.

And now you have the right to ask: What of the results? How perfectly has the work been done? Has it been worth while to do it? With regard to the last question, there can be no doubt that it is well worth while to institute measures which shall detect some cases of tuberculosis, even though through their imperfections they fail to detect them all. We have already considered the benefit that will accrue to the fighting force from the earliest possible elimination of the unfit from the ranks. The benefit financially is not at first sight so apparent. The Canadians calculate that every case of tuberculosis that reaches the other side of the water costs them $5,000, reckoning in among other expenses the cost of transportation both ways under war conditions. The cost for us for such cases can hardly be materially less. And it is a conservative estimate that a tuberculous soldier whose disability is pensionable will cost our Government on the average at least $1,000, though he never leave the United States. The amount, therefore, that will be saved by eliminating the tuberculous man early in his career as a soldier will easily run up into the millions.

As for the perfection of the work, there is of course always the possibility of doubt. It can only be said that all has been done that could be done under the circumstances, in the time allowed, with the men available. The character of the boards has been very high, on the whole. They have represented, some of them at least, the very best medical skill of the country among the younger men. Many of the examiners were members of the teaching forces of the best medical schools of the country. At one time it could have been said that there was hardly an examiner at work who had not been recommended by some one of the leading internists of the United States. And at the present time all the examiners have either been recommended by prominent medical men, or have been selected from among the internists or the tuberculosis specialists of the Medical Reserve Corps. Schools of diagnostic methods are now in operation at Washington, Fort Benjamin Harrison, Fort Oglethorpe, and Fort Riley, in which especially selected medical officers teach some of the refinements of physical diagnosis, the signs of the normal chest, the methods of diagnosticating tuberculosis by practical demonstration on the tuberculous patient, the methods of paper work in connection with the required reports, the interpretation of the X-ray negative and, incidentally, in teaching, learn the qualifications of the candidates.

The X-Ray.—Time would fail me to discuss, in sufficient detail to be satisfactory, the role of the X-ray in the diagnosis of tuberculosis. The subject should, however, be briefly referred to, because by many the use of the radiograph, and even its universal use, has been advocated as a means of diagnosis superior to physical signs.

The radiograph sometimes gives most valuable information when other means

fail. More frequently it is blind to evidences of recent lesions perfectly apparent to ordinary physical diagnosis. It reveals especially the old lesions. Save the rarer cases of acute pulmonary congestion, as of pneumonia, the shadows of the radiograph are very largely but records of past history, sometimes of very ancient history, of the tuberculous process. Those who have wide experience with the X-ray pictures of the normal, or of the apparently normal, lung are frequently astounded at the revelations of anatomical change in the deep lung of the vigorous subject, the evidences of a past immunizing reaction to tuberculosis. Widespread opacities may show so extensive past disease that it is unsafe to accept the subject—there is too much tuberculized tissue, too much likelihood of numerous lurking tubercle bacilli, the margin of safety in resistance is probably too slight. Usually the true condition in such cases is revealed with sufficient clearness by auscultatory methods. Still the radiograph is a valuable corroboration of the diagnosis. But there is a large group of cases with less extensive yet well marked opacities, which are not so significant of present danger as might be supposed.

It would be a calamity for the Army if all the bearers of such lesions were excluded from the ranks. We must remember that the first need of the Army is for men. The object of re-examination is not solely to eliminate; it is just as necessary to decide what men should be held to service. We use, then, the X-ray freely as a help to the diagnosis of doubtful cases as a means of pointing out conditions which may have been overlooked and demand renewed attention as evidence of the extent of involvement of the deep lung. We do not depend upon it as a means of diagnosis superior to diagnosis by physical signs. The use of the X-ray for the examination of all cases, which has been strongly advocated, is too expensive and consumes too much time at a juncture where haste is imperative. Few have a conception of the physical difficulties which arise when enormous numbers are concerned. One thousand plates may be handled with reasonable ease; ten thousand become difficult; forty thousand, an impossibility.

Hitherto we have considered the diagnosis on the assumption that there is a manifest tuberculous lesion to be detected. The problem is to remedy the sins of omission of previous examiners. But there is another phase of the subject of hardly less importance, namely, the possibility that a too refined diagnosis will deplete the ranks of the Army by removing from them many who present obscure signs of pulmonary impairment but are really fit to serve. The medical press of late years has teemed with articles advocating diagnosis of incipient tuberculosis by symptoms or by new signs, the variety of which is extraordinary. Fortunately, these new signs do not seem to be likely to become widely used. Only the inventors, as a rule, seem to make them work. Still the uninitiated could not be blamed if they derived the impression that the diagnosis of so-called early tuberculosis is a dark mystery, only possible for the expert, that it is unsafe to say with any positiveness that any given patient really has not tuberculosis. One can imagine what would be left of a company if such criteria as to the existence of tuberculosis were applied to its members in their full vigor. That this is not a baseless apprehension is shown by experience abroad. Blümel, a well-recognized German authority, reports that of soldiers reported to have tuberculosis examined by him, 80 % had no evidence of the active disease. Major Rist has had a very similar experience in the French Army, and Goldscheider has been forced to demand that moist rales shall be found present before German soldiers are decided to need sanatorium treatment.

Experience in the German Army, as well as in the English Army, has shown that men with old, not too large, and perfectly healed pulmonary lesions, do well under the conditions of active service. In other words, the man who was healthy and vigorous when enlisted has an excellent chance to remain healthy and vigorous during his service in the army. There has been altogether too much loose talk about the perils to health of army service. The armies that fought in the Civil War were composed very largely of adolescents, young men who had just attained their majority. Yet, in spite of severe hardships, and though tuberculosis was more rife then than now, how many a stripling emerged from the army perma-

nently benefited in health by his hard experiences! The same result is confidently to be expected in our present Armies, which are likewise composed of the youth of the country.

We propose, then, to do all we can to rid the Army of weaklings, and of those actually sick, without too anxious thought as to the possibility of lurking disease, trusting that abundant food, fresh air, and healthful exercise will strengthen, develop, and fortify rather than break down the constitution of our soldiers.

Now, supposing that most skilful examinations have detected every case of tuberculosis which existed in the Army, are we to congratulate ourselves that the disease is completely eradicated? Unfortunately, no. As you are aware, shells are tested in munition works by delicately contrived gauges which detect the slightest inaccuracies. Any shell which passes through the series of gauges successfully is a perfect shell. If physical diagnosis could detect all tuberculosis we might hope to pass through our examinations none but perfect men. But there is one important factor which we can not measure by our art, and that is the vital resistance. We can not tell whether the soldier who harbors the tubercle bacillus, as all men do, has a wide or a very narrow margin of safety. That is, we can not tell whether he is resisting the growth of some obscure groups of bacilli with difficulty, or whether he is practically immune under almost all conditions; nor can we tell whether the man who is now perfectly healthy and sufficiently resistant will lose his health and his resistance through dissipation or intercurrent disease.

There is an unavoidable percentage of tuberculosis. We shall do well if the ratio is not more than 2 per thousand, or 0.2 of 1 %. But this will mean for a million men 2,000 cases of tuberculosis. If this number of men were collected as patients in a single hospital the people unforewarned would hardly be blamed if they felt that examinations had been a failure, that something should have been done to remedy such a lamentable result. We must, therefore, be prepared for tuberculosis; a small percentage we will hope, but considering the size of the Army, a number of cases which absolutely seems large.

The medical profession can render valuable assistance in relieving the anxiety of the people by combating pessimism as to the dangers of military service. The sensationalist does much harm; he should be discouraged. One thing is certain: never has medical science been so potent in averting the various dangers which beset the soldier. Never has an army been more carefully examined. Besides the tuberculosis examiner, the cardiovascular specialist, the psychiatrist, the orthopedist and other experts are hard at work, not only to detect men who should be eliminated but what is equally important, to save men to the service. The people can be assured that everything that can be done by the self-sacrificing efforts of representatives of the best medical skill of the country is being done, to the end that our Armies shall be composed only of strong and vigorous men who can give a good account of themselves in the days of trial.

HOOKWORM DISEASE

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Uncinariasis or ancylostomiasis is defined by Castellani as a toxemia resulting in a progressive anemia caused either by *Ancylostoma duodenale* or by *Necator americanus*. It is most commonly known as the hookworm disease; also as miner's anemia, tunnel disease, dirt-eating disease and Egyptian chlorosis. There is some ground for thinking that this disease has a very ancient history. Perhaps the Ebers papyrus of 1550 B. C. refers to it. There seems little doubt that it was reported from Brazil about the middle of the seventeenth century. Our knowledge of the parasites is of somewhat recent date. One species *(Ancylostoma duodenale)* was discovered by Dubini, of Milan, in 1843; a second species *(Necator americanus)* was discovered in 1902. Griesinger recognized the former as the cause of the Egyptian chlorosis and still later Grassi showed that the presence of the worm could be determined by the existence of the ova in the stools.

There was a considerable outbreak of the disease with much mortality among the miners employed in the construction of the St. Gothard tunnel about the year 1880. It was spread by them widely over Italy and the south of Europe. It has occurred in Cornish mines in England and in other northern European countries. In a general way, we may say that though it does occur in temperate climates, its principal distribution is in the tropics and subtropics, where it is found, so to speak, universally, though it is more widely prevalent in certain districts. In Porto Rico 30 % of the annual mortality was formerly due directly or indirectly to the hookworm. Between 90 and 100 % of the inhabitants were infected. In Ceylon, it has been said to be on the whole more serious than the cholera. A majority of the inhabitants of some parts of India are affected, and in Egypt it is found at nearly all post-mortems. The discovery by Stiles in recent years will be recalled—that many of the white inhabitants of the South, particularly the mountaineer dwellers of the Southern Appalachians and the residents of sandy regions along the Atlantic and Gulf Coasts, are very extensively affected with the hookworm. Indeed it is supposed on very good grounds that the "laziness" and general degeneracy of these people, the "poor white trash" of the South, who really, as we know, are the purest-blooded English stock in the United States, are due largely to the ravages of this parasite. It is difficult to exaggerate the medical and economic importance of the hookworm in some of these places. Smith, in stating the causes that have made our Southern states lag in the march of American progress, cites as factors* their feudal agricultural system, negro slavery, the Civil War and the succeeding reconstruction period, yellow fever and other tropical diseases. He eloquently adds:

"But among them uncinariasis stands with malaria as worse than war and the devastation of battles, and worse than all the other pathogenic agencies in combination. Through the influence of one or both of these diseases, the men and women of the South, bred from the best of American Colonial stock, offspring of pioneers, with the blood of English gentry and continental cavaliers in their veins, sank lower and lower in physical degradation and squalor; were derided and denounced as lazy and shiftless and condemned in popular opinion as worthless and a disgrace. But in reality their languor was not the product of the balmy breezes or the luxurious bounty of Nature, as so often charged. * * * One can well fancy the actual curse of Rome to have been malaria and the old-world hookworm; and the glory of Greece may well have faded from the same influences; so, too, the power of the Moslems and the Moors and of the Spanish conquerors may perhaps have died out in the fever of malaria and the puny pallor of uncinariasis."

Besides the physical deterioration of the inhabitants of the South, Smith estimates an annual economic loss of from 250 to 500 million dollars there from the ravages of the hookworm.

The disease was no doubt introduced into the new world, especially into Porto Rico and the West Indian Islands, by African slaves, about the year 1760. The distribution of the two species of hookworm is somewhat different; in general terms we may describe it as follows:

1. The *Ancylostomà duodenale.* This is rather rare in the north of Europe, but is frequently found in southern Europe and Asia, especially in Ceylon. It is also widely distributed in the tropical and subtropical regions of Asia and America. It is very prevalent in Egypt and India and occurs in Australia and several of the Pacific islands.

2. The *Necator americanus.* This species, first described by Stiles, in 1902,* is found in the Southern United States from Virginia to Texas, and in South America, especially in Brazil. Also in Cuba, and particularly in the coffee-raising districts of Porto Rico. It has been found in Africa, especially among the pigmies in Central Africa and Asia. Both species are found in the Philippine Islands and in Panama. A third species, *Ancylostoma ceylonicum,* is occasionally found in man in India.

It is quite possible that this disease may assume some importance in connection with our Army. Chamberlain found hookworms present in about three-quarters or more of the Southern-bred recruits that he examined. The symptoms produced

*University of Pennsylvania Public Lectures, Philadelphia, February, 1915, pp. 286-7.

*Allen J. Smith, of Philadelphia, says that Stiles, soundly supported by the Public Health Service, "did more than all others together in fixing upon the public and the authorities the tremendous significance of uncinariasis."

seemed to be mild, though he noticed a general lack of vigor and an under-development in the soldiers as compared with Northern ones. It is easy to imagine that this might develop as a factor of importance in the present war, since large drafts of troops are to be recruited from the affected regions. This point is, as a matter of fact, the excuse for the appearance of this paper at the present time. The infection of soldiers by the hookworm, no doubt, favors the development of measles and other diseases,* besides leading to lack of stamina in the soldiers and resulting in general inefficiency in the camps. How important, then, that at this particular juncture we should give the subject especial attention!

White Americans in the Philippines were not very largely affected and the hookworm was found in not over 15 % of the general native population, the symptoms being mild and the disease in those islands apparently not of great economic importance.

In connection with the etiology of hookworm disease we shall first consider the parasites concerned. They belong to the zoological phylum, Nemathelminths or round worms, the class Nematoda, and the family Strongyloidæ. The Nematodes are round and unsegmented, and as a rule taper toward both ends. They usually have a complete digestive system with mouth, alimentary canal and anus, also an excretory system. The sexes are distinct and tube-like generative organs are present. The male is usually smaller and has a curved posterior end. In the family Strongyloidæ, the main characteristic is that the male has a caudal bursa, which is a membranous expansion at the posterior end and is used for copulatory purposes. No intermediate host is required as the larva emerges from the egg and goes through a certain course of development in earth or water, pending its ingestion by a new host. Many of the genera have armed mouths, a sort of chitinous armature. Among these occur the forms which are of most interest in human pathology.

The *Ancylostoma duodenale* is a cylindrical worm, white when alive, gray when dead, and reddish brown when full of blood. There is usually found about 1 male to 3 females. The female is about ½ inch long, more or less, and about 1 millimeter or 1/25 inch wide, the male being somewhat but not much smaller (Fig. 1). In both sexes the posterior end is the broadest part whence the body tapers forward to a narrow neck, ending in a powerfully armed, bulging and distinct mouth capsule. The margin of this capsule has four strong claw-like hooks, two on each side of the ventral line, and two conical teeth, one on each side of the dorsal line. The tail of the female is conical and ends in a short delicate spine, the anus being subterminal, and the vagina opening on the ventral surface at the commencement of the posterior third of the body. The tail of the male is provided with a large umbrella-like trilobate bursa with eleven ribs. Two long and very delicate spicules project from the cloaca which opens at the bottom of the bursa. In copulation the worms resemble the Greek letter *Gamma*. The *Necator americanus* is readily distinguishable from the *Ancylostoma* in that it is shorter and more slender. The buccal capsule is much smaller. Instead of the four ventral hook-like teeth or claws it has a ventral pair of prominent semilunar plates; the pair of dorsal teeth in the *Ancylostoma* is likewise represented by a pair of slightly developed chitinous plates. In the male the dorsal ray of the caudal bursa is divided to its base, its two branches are prominently divergent, and their tips are bipartite instead of tripartite. In the female the vulva is placed slightly in front of the middle of the body. The eggs are somewhat larger than those of the *Ancylostoma duodenale*. Stitt differentiates the two varieties of hookworm by a simple expedient in the microscopic technique. He orients the worm under the cover-glass, rolling it on its long axis by pressure on the glass with a wooden toothpick. This maneuver brings the buccal capsule into view, and, similarly, the posterior end of the worm. In the latter case, we look for the copulatory bursa of the male. The two branches of the dorsal ray are deeply cleft and the tips are bipartite in the *Necator;* the branches have a shallow cleft and the tips are tridigitate in the *Ancylostoma*.

Now as to the mode of infection. The adult parasite resides in the intestinal ca-

*See Edward L. Munson in the Military Surgeon, August, 1917.

nal of man and through the agency of the so numerous patients and "carriers," the disease is kept alive and widely distributed. In a day or two after leaving the host, the egg produces a minute rhabditiform embryo, which is quite active and voracious. This moults twice and grows in a week to about ½ a millimeter long and 1/20 as broad. It then passes into a torpid condition and is capable of living for an indefinite time (perhaps a year) in muddy water, damp earth, *et cetera*, and in this condition is the immediate source of the disease in man. It is transferred to the human host through the mouth from the hands or by dirt-eating, and so on, or more frequently it effects entrance, as experimentally proved by Looss, through the skin, particularly that of the feet and legs. Ashford thinks that the great majority of the infections in Porto Rico are acquired in the latter way. The parasite moults two more times and in a few weeks becomes adult and sexual.

In those cases where it enters by the skin it reaches the subcutaneous tissue, thence in turn the general blood circulation, the lungs, the trachea, the oesophagus, and the intestinal canal. The duodenum and jejunum are its favorite resting places. All ages are liable to the disease, but the young are mostly affected, and those, such as miners and workers on coffee plantations, truck gardens and similar places, who are naturally most exposed to infection from their careless habits in the disposal of night-soil and their contact with the dirt. In addition to the favorable climatic conditions, the carelessness in night-soil disposal of course is also the cause of the wide prevalence of hookworm disease among the white tenants of the South. Ashford mentions an incident where 50 men of the Porto Rico Regiment, wading through mud containing the parasites, were infected by water which entered the holes for the shoe laces.

The larvæ, entering the skin, set up a sort of dermatitis, called ground itch or water-itch (*mazamorra* in Porto Rico), which we will take up later in a little more detail.

The spread by dust is doubted by Stiles, owing to the great dependence of the larvæ on moisture.

There is some evidence of racial immunity, the disease not being so severe in the Negro or in the Filipino.

The duration of the life cycle in the bowel is unknown, but it is in all probability several (6 to 12) years.

SYMPTOMS

These are not always present. Indeed, in some places, as in the Philippines, we may say that they are not usually present. In other places, as in Porto Rico, severe symptoms are extremely common.

In Porto Rico, the disease begins in practically every case (we have no data as to the proportion elsewhere) with the *mazamorra* or *pani-ghao*, or "ground-itch," a sort of dermatitis usually affecting the feet. It comes on soon after exposure, and the favorite seat is between the toes. There is swelling and pain, redness, and the formation of papules, which develop into vesicles which later may suppurate if invaded by pyogenic organisms. In repeated infections ulcers about the lower part of the legs may be seen.

The onset of the disease is usually insidious, though Ashford describes acute cases characterized by vomiting and violent pains and melaena. He thinks the cases may be divided and described, with reference to the symptomatology, as light, moderate and severe.

In the *light cases* there is no especial pallor, though there is perhaps a slight sallowness of the complexion and an increased or perverted appetite with constipation. "Dyspepsia" and weariness are about all that the patient complains of. He is "run down" or lazy. Slight anemic symptoms, such as rapid heart action and shortness of breath on exertion, and perhaps a subjective sensation of dizziness, are, however, found on careful examination. There is noticeable reduction of mental activity. The hemoglobin is somewhat below normal (above 60 %), and eosinophilia is present.

In the *moderate cases*, the symptoms are more pronounced, the skin is dry, pale and cold, there are vague pains in the chest or knees or epigastrium, or paresthesias in the feet, and signs of intestinal fermentation. The secondary anemia is more marked. There is frequently cardiac hypertrophy and anemic murmurs, rapidity of action, perhaps palpitation, of the heart, dizziness, tinnitus aurium and headaches.

The hemoglobin is from 30 to 60 % of the normal and the red cells about 4,000,000 per cubic millimeter. Eosinophilia is marked, even sometimes to 40 % or more. The mental condition of the patient is apathetic, even stupid. The knee jerk is generally diminished and impotence or amenorrhoea, according to the sex, may be present. There may be a slight amount of albumen and casts in the urine. There is softness of the muscles but no emaciation, as a rule. In these cases the patient usually is unable to do his daily work.

In the *severe cases* the symptoms are decided and they may result fatally. There is a gradually advancing toxemia. The anemia is extreme; it tends to lose the secondary type and to take on the features of true pernicious anemia. The hemoglobin is below 30 % and in the very worst cases the eosinophilia disappears. In this or any severe anemia the blood, when drawn off, appears thin and watery and coagulates very slowly. There is oedema of the feet and, it may be, anasarca. The appetite is lost and the symptoms of intestinal fermentation are constant. Dilatation of the heart tends to supervene. The urine is albuminous. The muscles are flabby. The nervous symptoms are exaggerated. Insomnia and headache and a confusional state, or even manic-depressive insanity, may set in. The deep reflexes are abolished. Retinitis and retinal hemorrhages may supervene. An irregular sort of fever is not uncommon, though subnormal temperature is the rule. The fever, when it does occur, is thought to be due to bacterial infection through the puncture wounds made by the hookworms, and not directly due to the latter themselves. Death occurs from asthenia or from some intercurrent disease.

In all the stages microscopic examination shows the ova of the *Necator* in the feces (see below). Ashford considers that uncinariasis is caused by the invasion of a sufficient number of hookworms to overcome the racial or natural immunity and that the symptoms produced depend on, first, the number of worms; secondly, the length of time they have remained in the host; thirdly, the susceptibility of the host to their action, and his power of resistance; and fourthly, the environment of the host.

In young patients the normal development is often markedly retarded.

The hookworms suck blood from the intestinal mucosa to which they are attached, but it is believed that this loss of blood is not sufficient to account for the symptoms of the disease. In all probability, though it has not been yet proved, a hemolytic toxin is formed, which is the cause of the disturbance (so often profound as we have seen) produced by the parasite.

A fatal issue may rarely supervene in a few weeks or months, but usually the disease runs through a series of years.

Post-mortem, the worms are found in the intestine, most often in the upper part of the jejunum. Small extravasations of blood are seen in the intestinal mucous membrane. The body is not wasted. There are evidences of chronic intestinal catarrh. The most characteristic feature in the pathology is a fatty degeneration of the liver and other viscera, including the heart. The latter organ is dilated and flabby. The viscera appear anemic, sometimes almost white, and the muscles pale and sodden. The lungs are oedematous and generalized oedema may be present. A yellow pigment, haemosiderin, is seen microscopically in the liver and kidney cells.

Up until a few years ago, uncinariasis cases were usually treated (and with poor success as one can imagine) for malaria or "anemia" with quinin and iron tonics. I can recall a series of these cases that I had on the Gulf Coast of Florida about fifteen years ago, among the so-called Florida "crackers" or poor whites who lived in the vicinity of Fort Barrancas, where I was then stationed. I thought they were cases of chronic malaria; some of them, in fact, having coincident malaria and showing the plasmodium in the blood. We did not know then that hookworm occurred in the United States and so were not on the lookout for it. Some of the "crackers" were indeed better informed than the physicians. I recollect that the parent of one of my patients argued strenuously with me that the symptoms were due to "worms." Looking back upon these cases now, I realize that several of them were quite typical of uncinariasis as we now know it, with the muddy

complexions, habit of dirt eating, mental inactivity, and all.

DIAGNOSIS

Whenever, under the usual conditions that attend this affection, we find anemic symptoms, we examine the feces microscopically and in positive cases find the ova in the stools. There may be immense numbers of these ova, even several millions in one passage.

The eosinophilia on blood examination and the secondary anemia are valuable indications of the presence of the disease. Stiles has described a simple emergency test of the staining of white blotting paper by the feces that is occasionally useful, but not alone dependable. The presence of the ground-itch should lead us to suspect a resulting hookworm infection.

Malaria, chlorosis and pernicious anemia are to be excluded by the usual methods, mainly the blood examination.

The *diagnosis* of the intestinal worms is very simple. In the case of the tapeworms the segments are passed in the feces and are easily recognized as such. The round worm is sometimes passed from the mouth or anus, and quite commonly the pin worm is found in the feces or about the perineum.

As a rule, in the case of the hookworm, we rely on the microscopical examination of the feces, and the recognition of the various ova of the different parasites. The method commonly used is to place on the glass slide* a small portion of the feces about the size of a hemp seed and spread this out in a thin, transparent layer; usually the application of the cover-glass can be dispensed with. Water may be added when necessary to soften the little lump of feces. When the stools are loose and watery a little may be taken up with a pipette and the smear made from this. Purgatives, especially salines, are sometimes administered to obtain the stool, but are not usually required.

The use of the oil immersion lens is not necessary. The one-third to two-thirds inch objective will suffice for the general search, the high power being substituted where it is desired to look closer into details. Search should be made systematically all over the slide and a total area equal to ten cover-glasses should be examined before making a negative diagnosis. With a little practice one becomes familiar with the various ova. It is so simple, indeed, that in the Army we use trained, intelligent and reliable hospital corps men to do the routine work of the microscopic examination of the feces.

The four most important ova in this connection are those of the *Ascaris*, the *Trichocephalus*, the *Ancylostoma*, and *Necator*. These are the common species found; the ova of *Oxyuris* is rarely found in the stools, owing to the fact that its eggs are not generally extruded; the eggs of dwarf tapeworms *(Hymenolepis nana)* are much more commonly found in the South than are the ova of *Taenia*.

One should become thoroughly familiar with the appearance of the types of common ova mentioned (Fig. 2). It will then not be necessary to bother much as to details of the rare ones, for they can be looked up in the literature as occasion requires.

The *Trichocephalus* (s. *Trichuris*) ova are rather striking looking. They are oval in shape, double outlined and sharply defined, the ends of the long axis being somewhat pointed and tipped with a little shining projection or knob. In a general way, they resemble a sort of oval tray, the ends looking like the handles of the platter. They are dark-brown in color and do not contain a differentiated embryo.

The ova of the *Ascaris* are considerably larger, being about 60 x 40 microns in size. They are also usually yellow to dark-brown in color from bile staining. Their outlines are not nearly so sharp. They have a coarse thick shell, roughened by warty-looking excrescences. No embryo or segmentation of the yolk can be discerned. The rough outer shell is easily detached, and if so may lead to some confusion. However, the double outline and the undifferentiated granular contents should serve to differentiate them.

The ova of the *Ancylostoma* (and *Necator)* contrast markedly with the others. In color they are beautifully clear and transparent. They are of about the size of the *Ascaris* ova; they have a thin, smooth capsule. The main point is that the contents have commenced to develop and are divided into 2, 4 or sometimes 8 light-colored yolk segments. If kept for a

*The 2 by 3 fecal slide is much more convenient than the 1 by 3 English slide.

short time, the worm-like embryo is sometimes seen. The eggs of the *Necator* are said, on careful measurement, to average a larger size than those of the *Ancylostoma*. *Strongyloides* ova strongly resemble those of the hookworm, but they are rarely ever found in the stools; for they develop in the intestine to an actively motile embryo which is passed in the fresh stool. *Trichostrongylus* eggs are similar in general appearance to hookworm eggs, but may be differentiated by the fact that they contain more yolk-segments.

Oxyuris ova have a thicker capsule than the *Ancylostoma;* one side of the egg is generally flattened and the developed vermiform embryo is usually seen within the capsule. Certain tapeworms *(Taenia)* have thick radially striated oncospheres or embryonic capsules and an embryo with six hooklets in the interior, the eggs usually having lost their outer part by the time they are passed. The eggs, as such, have no very characteristic markings. The ovum of the *Hymenolepis nana*, however, shows peculiar filamentous markings between the two thin egg shells. Most of the Trematode eggs and the *Dibothriocephalus* ova (of the Cestodes) have an operculum or lid at one end. Measurements are usually required to differentiate the species of Trematode eggs.

Darling recommends in the diagnosis of intestinal worms, in addition to the direct smear method, the use of plate culture and differential density methods. He says they are more accurate as well as quicker where many stools are to be examined.

In the plate culture method, a portion of the stool is placed in the centre of a Petri dish, several drops of sterile tap water added, and the dish incubated at room temperature for 24 hours. This serves to hatch out the embryos which can then be examined and differentiated as such, especially in *Strongyloides* infections. The differential density method (after Bass) consists in centrifuging the feces in tubes first with sterile tap water, then with a solution of calcium chlorid. The ova (and sometimes adult *Oxyuris*) are segregated in the surface films which can be pipetted off and examined. Darling says the number of positive findings is increased considerably by the use of these methods.

Under proper treatment, the *prognosis* of all but the most advanced or long-standing cases is very favorable, provided, as Daniels says, the *worms are completely expelled*. To determine this, the stool examination should be repeated a week or two after the termination of the treatment.

The prognosis is grave in parturient women. Ashford thinks that the eosinophiles afford a good prognostic indication, in that their presence in high proportion shows good power of resistance to the effects of the hypothetical toxin, while their absence or fall in percentage indicates the opposite tendency. I have referred to the former great mortality in Porto Rico from the results of hookworm infection. This has been greatly reduced by the labors of Ashford and the Porto Rico Anemia Commission during the last fifteen years. In that time they have given about a third of the total population of the island the specific treatment and the general death rate has in consequence been reduced from 33 to 20 per 1,000 per annum. This is one of the most important pieces of public health work that has ever been accomplished, not only in the actual achievement in the great reduction in sickness and death in Porto Rico, but also in the educational value of the campaign there. The attention of the world has been called to the efficiency of modern sanitary methods, and the day much hastened when sanitary effort will be universal instead of sporadic. The Rockefeller Hookworm Commission in the South has no doubt accomplished much in this direction, as well as in the local relief of much suffering and inefficiency. Up to and including 1914, when the Commission finished its five-year period of work for which it was founded, it had distributed free treatment to 694,494 cases at an average cost of $1.28 per head.

It is worthy of note that the discovery of the conditions formerly existing in Porto Rico, as well as the inception and tireless execution of the extensive sanitary campaigns there, were due mainly to the intelligence and energy of Colonel Bailey K. Ashford, of the Army Medical Corps.*

A word here as to uncinariasis in the Philippines. The health authorities there

*Stiles has frequently made the public statement that Porto Rico owes more to Ashford than to any other living person.

have made the statement that the death rate in Bilibid prison in Manila was reduced from 75 per 1,000 per annum to less than 15, concurrent with the extensive and systematic treatment of the inmates for intestinal parasites. They ascribed the remarkable results to the freeing of the prisoners from the worms, and the hookworm, in this instance, would of course be the most important parasite. Personally, I have never seen any serious results in the Filipino from infection with the hookworm, although these worms are often found in routine stool examination of native patients in the hospitals. We had a thousand prisoners quartered at Corregidor and therefore quite a good native medical clinic. This experience of mine, coupled with Chamberlain's reported results that I have mentioned, leads me to believe that the Philippine health officials were misled in this connection by the *post hoc, ergo propter hoc* fallacy and that the great reduction in mortality at Bilibid was most probably due to other unnoted sanitary improvements that were taking place during the time that the intestinal worm experiments were carried out. However, I do not wish to minimize the importance of attention to these points. In many places the thing is serious, and anywhere the individual is no doubt better off without these unwelcome visitors. Whenever they are found, I should advise the institution of proper treatment and prophylaxis. Their presence would show, at least, improper local conditions in regard to conservancy, and the liability to the incurring of intestinal affections, and a blow at them would be a blow at typhoid and cholera and dysentery and all the more serious diseases spread by lack of proper attention to the disposal of excreta.

TREATMENT

I think we may fairly state that this is one of the few diseases in which we fortunately have what may be called a specific treatment. Three drugs have this specific action: thymol, oil of chenopodium and betanaphthol, and of these chenopodium is the most efficacious, thymol stands second, and betanaphthol third. Betanaphthol sometimes causes irritation of the kidney, and even perhaps nephritis. Oil of chenopodium expels the round worms as well as the hookworms, but requires prompt purgation; occasionally it is followed by unfavorable results and even by death. *Thymol* must be given under precautions as to diet and even then it is followed by unfavorable poisonous symptoms and even by death in some cases. They have had much more experience with the treatment of hookworm disease in Porto Rico than in any other place, so I shall describe Ashford's method of administering it. In the evening an ounce of a saline cathartic such as magnesium or sodium sulphate is given, and the patient is kept in bed and without food until the next day at 1 o'clock p. m. Two grams of powdered thymol (adult dose) in capsules are given at 8 o'clock in the morning and the same dose is repeated at 10 o'clock. Stiles prefers to divide the thymol into three equal doses, administered at 6, 7 and 8, and followed by salts at 10 a. m. His argument is that he obtains the same amount of grain-hour action, but if the patient has an idiosyncrasy to thymol, the effects will be less on a one-third than on a half dose, and less on a two-thirds than on a three-thirds dose. If the second dose is well taken, the third dose rarely produces untoward effects. At noon a purgative dose of salts is administered. In the afternoon light diet is allowed, avoiding oils or fatty foods such as butter and milk. Solvents of the drug, such as alcohol and oils, are to be avoided during the treatment, as they are likely to lead to the absorption into the system of poisonous amounts of the drug. It will, I think, be of interest to note here that the standard medical text books, as late as 1905, recommended the giving of thymol in brandy and, following this, castor oil!* This mistake has been corrected in later editions, but it is consoling to know that even the leaders in the medical profession can not know everything; for even Homer nods at times. We all make mistakes. The thing to do is to have them as few as possible and to profit by them when they do occur. But to return to our muttons. The course of treatment I have outlined is repeated each week until, on microscopic examination, the worms are found to be all expelled. Three or more courses

*This was the English routine in Egypt, which was copied into American text books, prior to American experience with the disease.

of treatment may be necessary. No subsequent tonics are required, according to Ashford. The dose is graded according to the age and strength of the patient. Under five years about ½ gram is the total dose; up to ten, about 1 gram. In the aged and weak the ordinary adult dose should be reduced. A million or two doses of thymol have been given in Porto Rico without fatal result, but several deaths have occurred during treatment in the Southern states and elsewhere. The untoward effects which sometimes occur are depression and dizziness, with burning and irritation of the bowels. Delirium and collapse with dark urine may occur in severe cases of poisoning.

Fig. 1.
Ancylostoma duodenale (life size); shows some worms adherent to the intestinal mucosa and some free. *(After Jefferys and Maxwell.)*

If *betanaphthol* is given, the dose is about one-half that of the thymol. The ethereal extract of male fern in doses of eight grams has been used successfully in Porto Rico.

Castellani thinks that eucalyptol with chloroform is safer than thymol in the debilitated patient. The formula recommended is as follows:

Olei eucalypti (seu eucalyptol) minims xxx
Chloroformis ..... minims xlv
Olei ricini ..... drams x

One-half to be given the first thing in the morning, the other in half an hour, the administration to be preceded a few hours earlier by a saline purgative.

Ashford says that this treatment is dangerous and unjustifiable. When the doctors disagree, who shall decide? The practitioner, or rather the patient, can "pay his money and take his choice."

When thymol can not be obtained, satisfactory treatment may be effected with *oil of chenopodium*, some authorities even preferring the latter drug. After an eight hours' fast, a dose of 16 drops of the oil is administered (to the adult) and at two-hour intervals thereafter two more such doses. Some physicians prefer to give this drug daily for three days, followed by four drugless days. Two hours after the last dose an ounce of castor oil with or without 50 drops of chloroform is given. It may be necessary to repeat the treatment a week later. The bad taste and unpleasant after-symptoms of dizziness may be obviated, it is said, by the use of strong extract of coffee. It is claimed that the oil of chenopodium is not toxic in therapeutic doses, but prompt purgation is necessary, and several cases of severe and even fatal poisoning are known.

A 3 % solution of salicylic acid in alcohol is the best local application for the ground itch.

PROPHYLAXIS

The main principle to be considered in the devising of methods of *prophylaxis* is the *prevention of fecal contamination* of the soil and water, especially the soil.

Fig. 2.
a. *Trichocephalus dispar;* b. *Ascaris lumbricoides;* c. *Ancylostoma duodenale. (After Sonsino.)*

When the soil is already badly contaminated, it had best be burned over or even abandoned for a time. The establishment of proper methods of conservancy of the night-soil is the most rational thing to do; when these methods become universal, the further extension of the disease will necessarily cease. However, this is a kind of

counsel of perfection in primitive communities like Porto Rico, and it will be many years, perhaps several generations, before really sanitary methods of disposition of excreta are practiced everywhere. Meanwhile we do what we can to educate the natives as to the bad effects of the promiscuous deposition of fecal material on the ground about inhabited places, and as to the methods by which hookworm disease is spread, and the importance of the simple treatment recommended. We try to encourage the installation of some kind of so-called sanitary privies. A simple device along this line has been invented by the U. S. Public Health Service.* Of the simple methods, shallow trenching is probably not sufficient. The septic tank is said to be effective against the eggs and larvæ of entozoa. There exist designs for simple and easily constructed incinerators which can be erected on large plantations.

We should carry on a *campaign of education*, especially in the schools and by lectures and pamphlets, along this line. This is indeed a slow but sure method of obtaining sanitary results. In the course of a generation or so entirely new habits of life can be put into effect.**

The mammoth plan was conceived and actually carried into execution in Porto Rico of the *specific treatment of all those harboring the parasite*, the more or less healthy "carriers" as well as those complaining of active symptoms. This means, as we have seen, the drugging of practically the entire population of the island. The work was done by the establishment of "anemia dispensaries" in convenient localities and by encouraging the general population, especially those with skin diseases and anemic symptoms, to apply for examination and treatment therein. Great numbers of the people, about one-third or more of the inhabitants of the island, have been reached and treated in this way. Ashford thinks that some kind of an ambulant dispensary service is needed to complete and hasten the results of the good work being done by the stationary dispensaries. Collections of men such as gangs of coolies living together in close association on plantations should be systematically examined and treated when necessary. Habits of personal *cleanliness*, especially the washing of the hands before eating, are to be advocated in and out of season. The *wearing* of *shoes* by the natives (and of *gloves* by miners) is a very important prophylactic measure, for, as we have seen, so many of these infections are acquired through the skin of the feet and hands. The boiling of water locally suspicious, and the avoidance of uncooked fresh vegetables are, as in the case of other intestinal diseases, measures often necessary to be applied. But proper disposal of human excreta is worth more than all of these measures combined.

Naturally, the stools of patients under treatment are to be disinfected, or to be disposed of in a way that will prevent the spread of the infection. Screening from flies is a measure worthy of consideration. In countries still uninfected, quarantine measures may be established to prevent the entrance of infected immigrants. The State of California has passed a law along these lines directed at Indian coolies, who are quite extensively infected with the hookworm.

Ashford emphasizes, as the two vitally important measures (1) the prevention of soil pollution and (2) the treatment of existing cases.

As in most diseases, the principles of prophylaxis are quite simple, but in practice it is extremely difficult to carry them out. Great energy, patience and persistence are required to accomplish noteworthy results in seriously affected regions.

The moral, from a prophylactic point of view, that I wish to emphasize, is the consideration of hookworm infection in connection with the soldiers drafted in the South. Owing to the extremely wide prevalence of this affection in that region, there is great likelihood that large numbers of infected men or at least "carriers" will be enlisted there in the Army; that some of them under the strain of active service will develop symptoms and become

*Stiles, C. W., Bull. No. 37, Pub. Health Serv., Washington, Govt. Printing Office, Edition of March 23, 1914.

**The Rockefeller Commission has installed in the Army Medical Museum at Washington an interesting and enlightening hookworm exhibit, which is open to the inspection of the public.

a positive burden on their regiments; that others not actually on sick report will exhibit the inertia and lack of initiative so common in this affection and so foreign to the Army conception of full soldierly duty, thus tending to reduce the efficiency of their organizations to the minimum; and that these men will be more liable than the really healthy to the contraction of camp diseases. Pension claims would no doubt be largely increased in number from this cause.

Finally, it seems worthy of attention that the sending of large numbers of hookworm carriers to Europe would in all likelihood result, in connection with the inevitable crudities of camp life, in the spreading of the American variety of hookworm into hitherto unaffected regions abroad. The peculiar conditions of trench warfare make it not at all unlikely that disastrous epidemics might be started among the troops. Witness the St. Gothard and Andersonville Stockade epidemics cited by Stiles.* To go bearing gifts of this sort would largely counteract the good results that our sorely tried Allies are expecting from our participation "over there" in the war! What can we do to prevent such a calamitous *faux pas?*

There seems no doubt, with our present lights, that there is one way, and one way only, to meet the requirements of the situation. This is to make, at the training camps, a microscopic examination of the feces of all recruits enlisted in the South. As all former experimentation has shown, a large proportion of these soldiers will, no doubt, be found to be infected with the American hookworm. These men can then be given the simple treatment that experience has demonstrated to be effective in this disease, and the likelihood of serious trouble to the new Army thus eliminated in a comparatively easy way, at the very start.

*Certain Military Aspects of Hookworm Disease. Reprint No. 418 from the Public Health Reports, August 17, 1917.

THE AMERICAN RED CROSS*

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The American Red Cross is authorized by the President as the only volunteer society to render aid to our land and naval forces in time of war. Hence, since the declaration of war this society has grown to gigantic size and has accomplished a tremendous work, so great that it would be impossible for me to cover its activities in one address. I shall, therefore, confine myself to the work of the Department of Military Relief, to which I am now detailed for duty by the Surgeon-General of the United States Army.

This Department was organized in 1916 by Colonel Jefferson R. Kean, who, having spent thirty years in the service of the Medical Department of the Army, realized that on the outbreak of a war this Department would have to be very largely expanded in order to meet the requirements of the increase in the military forces. He, therefore, conceived the idea of having the American Red Cross organize a number of base hospitals, which would be ready for service in event of urgent necessity. These hospitals were organized from the large institutions in the various cities, which are known as the parent hospitals.

The leading men of their respective hospitals were designated as Directors of the Red Cross base hospitals and at once organized their assistants into the prescribed personnel of such base hospitals, each hospital to have five hundred beds capacity.

The work of raising funds for equipment was undertaken in connection with the local Red Cross chapters, or by personal solicitation, and this equipment, as purchased, was stored ready for any emergency.

On the arrival in this country of the Anglo-French Commissions the Surgeon-General of the United States Army was requested to lend the British Expeditionary Forces some assistance for its medi-

*Address, Public Session, Southern Medical Association, Eleventh Annual Meeting, Memphis, Tenn., Nov. 12-15, 1917.

cal department in order to help in the work of the British general hospitals behind the English line in Flanders. Upon the request of General Gorgas the Red Cross was able to dispatch, at once, six base hospitals, all of which were on the way over within three weeks from the date of call. These were the Cleveland Unit No. 4, under Dr. G. W. Crile; the Harvard Unit No. 5, under Dr. Harvey Cushing; the Chicago Unit No. 12, under Dr. F. A. Bosley; the St. Louis Unit No. 21, under Dr. Fred T. Murphy; the Philadelphia Unit No. 10, under Dr. R. H. Harte; and the New York Unit No. 2, under Dr. George E. Brewer.

Each hospital had 24 physicians, 65 trained nurses and 153 enlisted men, and on arrival in France took over various British general hospitals, which were from one to two thousand bed capacity, some of them so close up that these hospitals are now receiving wounded from the line within eight to ten hours from the time of injury. They have, as a result, been working under high pressure all the time, and have all been reinforced by additional personnel to enable them to carry on the work successfully.

It was some of these hospitals that were bombed by the Teuton aviators and one of the doctors and several of the enlisted men of Unit No. 5 were killed in that attack, besides a number from other hospitals being wounded at the same time.

There are now fifty Red Cross base hospitals ready for service. Quite a number are on active duty either in France or under orders to go as soon as transportation can be provided. The Red Cross has equipped all of these units at an average cost of $50,000 each, and has established a large supply depot in France, where any additional equipment and medicine can be obtained, if necessary; though, at present, the hospitals on duty with the military forces receive their supplies either from the American or British Medical Departments, depending upon which force to which they may be attached.

At the same time that these hospitals were organized the Red Cross began the organization of ambulance companies for duty with the sanitary forces of our Army. There were 46 companies completed, each company having 5 doctors and 119 enlisted men. All of them were taken into the Medical Department of the Army and are now either in France or in the various camps throughout the United States. The stories of the adventures and the gallantry of the members of the Volunteer Red Cross Ambulance Service who have been on duty with the French Army since the beginning of the war appealed to young Americans, and our ambulance service, as a result, was most popular, the number of applicants far exceeding the quota desired, so that these units were filled with very little effort.

There are also hospital units and sanitary training detachments organized under the Red Cross, the former to be utilized as a reserve for our base hospitals and the latter for training men in first aid and in the duties of a sanitary soldier. The Red Cross is desirous of having at least one of these detachments organized by each chapter throughout the United States. A detachment has two doctors, a quartermaster and 60 men. The doctors are commandant and assistant commandant, respectively. The men should be given a regular course in first aid and be thoroughly drilled in litter and ambulance drill, so that after a course of training they can enlist in the Medical Department of the United States Army and be ready to take up their work at once, thereby relieving the overworked officers of the Medical Corps of the necessity of training them from the beginning after their entry into the Army, and in this manner forming a reserve from which the Surgeon-General's Office can draw as it needs men to keep the personnel of the hospitals and sanitary units filled during the period of the war. As you know, there are now about seventy thousand men enlisted in this department of the Army, and it will require a large reserve to keep it up to the necessary strength. If the Red Cross can by means of its detachments help out in this training it will be a tremendous assistance in the care of our wounded soldiers, for upon the enlisted men of the Medical Department falls the duty of the first care a wounded man receives upon the field of battle. A sanitary soldier can not be trained in a short period of time. It requires intelligence and patience on the part of both the man and his instructor to make this work a success. The doctors at home must give the instruction

and the Red Cross chapters must give the detachments their earnest co-operation and support. Each chapter has detailed information as to the organization of these detachments.

Independent of the military service the Red Cross has dispatched commissions of doctors, nurses and others to Russia, Serbia, Roumania, Italy and France.

The greatest work is being done in France, where a large commission, headed by Major Murphy, one-time officer in the United States Army, has charge of all the relief for both France and Belgium, and where, to serve the American troops and the hundreds of war hospitals behind the French firing line, and to reach the thousands of French refugees, this commission has established a system of thirteen large warehouses throughout France.

Six of the new Red Cross warehouses have been located in Paris, which serves as the center of the distribution system. Ten other warehouses are located in departments outside the capital and from these supplies are distributed by motor trucks, wagons and every available means of transportation to hospitals and other institutions.

Approximately fifteen thousand tons of materials are now being distributed monthly from these warehouses by the Red Cross Commission. A large proportion of these supplies is received directly from the United States and is forwarded by the Red Cross Supply Service from chapter work rooms and from relief societies affiliated with the Red Cross. Owing to the great shortage of ocean tonnage, large quantities of supplies have been purchased by the Red Cross Commission in France.

Plans are now under way to increase the warehouse facilities of the Commission at French seaports. At present these are very limited, but as soon as additional storage space can be provided, greater quantities of supplies from the United States can be handled.

The stocks of goods carried by the warehouses are as varied as those of great wholesale houses or department stores. Every kind of medical supplies, drugs and surgical instruments is carried in stock for the use of hospital staffs. Foodstuffs, clothing, building materials, plowing implements and tools are also being imported in large quantities for the assistance of French refugees.

There has been organized a canteen service, which is for the relief and comfort of French soldiers returning from the front on furlough, and this is being managed by patriotic American women who have volunteered their services. There is also a large corps of physicians and nurses organized into what is known as the Infant Welfare Unit, for the care of the French children and for the education of French mothers in the conservation of the health of French infants. In this service are quite a number of American women physicians.

The War Council has appropriated a million dollars for the establishment of a model public health service to help out the public health service of France.

There is extensive work in the reconstruction of French villages being carried on in the devastated areas left by the retreating Germans.

To Russia has been sent ambulances, medicine and other supplies; so also to Roumania and Serbia. The Red Cross has just shipped 5,000 bags of flour for Serbians in Austrian prison camps.

This is the first shipment of a series of food purchases which the Red Cross, in co-operation with the Serbian Government, is making in this country for relief of prisoners.

The Allies must provide living necessities for their soldiers who are captured, because the Central Powers are not providing prisoners of war with sufficient food to keep them in good health. By arrangement with Germany and Austria, prisoners are permitted to receive extra rations and clothing from their home governments.

The American Red Cross Commission in Serbia reports that the ravages of war there are even worse than in Belgium and Roumania, and many Serbian refugees have been entirely dependent upon America for relief. Next to Belgium and France, Serbia has been the chief center of American relief work abroad.

Out of the War Fund recently collected by the Red Cross the War Council has appropriated approximately twenty-five million dollars to carry on the relief outlined to date.

The Red Cross membership has passed

the four million mark and is still growing. It is hoped that ultimately every family in the United States will be represented in its membership.

To make the work of the Red Cross for humanity successful the physicians of the United States will have to give their services unreservedly, for 'though its work is to relieve the suffering of those left behind and to care for dependents who are without means of support, yet the great work of the Red Cross is to assist in the care of our wounded soldiers and sailors, and who can do this except the medical profession?

Not long after our forces become engaged in the actual fighting, we shall begin to receive the flow of wounded and cripples. Every community in this country will have its proportion returning from the quota sent out to fight its battles.

Many men will be without an arm or a leg, or without both arms or legs. Some will be blind; many will be nervous wrecks or insane; and one and all must be cared for. Those not totally incapacitated must be made fit to return to a place in civil life, perhaps the same place they occupied before leaving. But if unfitted on account of wounds to take up where they left off, then they must be re-educated along new lines. Very few will be totally incapacitated and even though the Government may make generous provision in the way of pensions, these young men must not be allowed to degenerate into worthless parasites when by re-education they can be put back into a life of usefulness.

It has been demonstrated by the French and British that such re-education is possible, and they publish wonderful results that have been achieved in making new men out of the wrecks that have been returned to civil life from the ravages of this conflict.

Not only must these men be taught once more to take their places in human industry, but places must be found for them in the industries. Each community will have its individual charges, and each community must prepare for it. A survey should be made so that when our men do return you will know what places are available into which they can be placed to advantage, and so that they will in no sense be dependent upon public or other charity.

They will, of course, receive whatever pensions the Government provides; but that will never be enough for any man with a spark of ambition. However, they must be impressed with the fact that there will be no chance of their losing a pension once provided, no matter how successful they become in their new life.

The duty of the American people, through their Red Cross Society, is a definite one. Our young men are going forth to fight the battles of their country. Those who stay at home must provide for their dependents left behind and for those who return. The Red Cross is organized for this purpose and the American people should become as one with the Red Cross. Every man, woman and child in the country should become a member and an active member of this great Society to aid in faithfully carrying out the work which is at hand and that which will come to be done.

The response from people of the United States already indicates that they appreciate their obligations, and I have no doubt of the success of the Red Cross to do what is expected of it. But each and every one must realize that it requires constant and continued individual assistance, regardless of personal sacrifice to perform our duty to the defenders of our liberty. I hope every American will come to feel that the Red Cross Society is simply the great American public organized for assistance to their Government in its time of need.

MEDICAL PREPAREDNESS FOR NATIONAL DEFENSE*

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It must be clear to close observers of world events that the titanic struggle now in progress bears the same relation to civilization that the great convulsions of Nature have borne to the geologic periods of the world's development, and that this

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conflict must determine not only the fate of nations, but whether liberty or despotism shall mould the destinies of men.

Though the conflict was not of our making, there can now be no question as to the part America must play. The task, though stupendous, is definite and clear cut.

We are in the fight to a finish and can brook no thought of defeat. Let us face the facts squarely.

It is axiomatic that to win the war we must not only be prepared to parry every blow the enemy may strike, but to deal harder blows than he, and to strike them more effectively. That axiom involves: first, an estimate of the strength of our enemy and of the use he may be expected to make of it; and, second, what we must do to meet and defeat him.

Let us not deceive ourselves or be deceived by the insiduous submerged methods of the Hohenzollerns. If they could lead us to believe that peace is near at hand, what effect would that have upon our efforts? What would be the reaction of those among you who have not yet joined the Corps? Would you not say that because of the burdens you are now carrying, and because peace is near at hand, it would be unnecessary and improper for you to sacrifice all at this time? If you would take that position, what would be the attitude of industrial giants now confronted by war orders involving the transformation of plants at the cost of millions of dollars and at the sacrifice of a business which they have spent years in building up? Would they not hesitate? Would they not feel that they owed it to their stockholders to refrain from making such a move if, by delay, some other concern could be induced to take the orders? Would not such delay, such a paralysis of industry, be worth more to Germany than anything else that could possibly happen?

Now what are the facts? Is Germany starving—is there mutiny and disaffection in her Army—is she near a political or financial collapse? The latest information we have from the front indicates that wounded German soldiers and prisoners are well fed, well kept, and have no thought but that of complete and early success of German arms. It seems clear that the statements emanating from German sources to the effect that there is mutiny in the Navy and disaffection in the Army are pure and simple camouflage for the purpose of deceiving Allied nations. It seems clear, also, that there is not the slightest possible chance of an internal collapse. Let us for a moment compare the situation in Germany with that of the Civil War in this country. It is an historic fact that though the Confederate States were overrun by their adversary, were bankrupt in men, money and material resources, many of their civil and military population in rags, barefooted and hungry, they continued to fight desperately for more than two years before they surrendered. Now let us apply that situation to Germany. Since the beginning of the war she has fought on Allied soil. Of the entire front, approximating 4,000 miles, the Allies are holding firm on less than one-fourth. They are driving the enemy back on a small section of her Western front, while the central powers are pounding almost at will more than 1,000 miles of front in Russia, Roumania and Italy. Does any one believe that we will, within a short period of time, reach the Rhine? Is it probable that when we reach within a few miles of Berlin, Germany will be any more ready to surrender than the Allies were when the German lines approached Paris? Let us recall that at the beginning of the war France occupied an area of a little more than 207,000 square miles and Germany an area of a little more than 208,600 square miles. Today Germany completely dominates an area nearly ten times that great, and considerably more than five times the combined areas of France, Italy and the British Isles. The wealth of food, fuel, raw materials and labor in this area is almost without limit. She now dominates the actions and destinies of more than 168,000,000. England has no physical contact with Germany. The French and Italian frontiers constitute only about one-sixth of the circumference of the central powers. Transportation to other fronts is circuitous, distant and difficult. The Allies have done almost superhuman work in meeting, matching and checking the onslaught of a nation whose rulers had been, for half a century, preparing with diabolic cleverness, energy and cunning to spring this surprise at-

tack. Suddenly called from the diligent pursuit of the arts of peace, our Allies were forced overnight, as it were, to resist this ruthless and fiendish attack made by the Hohenzollerns with the deliberate purpose of stealing the world. Our Allies have endured the weary months of sacrifice, death and desolation with wonderful fortitude and courage. For three years they have defended civilization, liberty, democracy and humanity. During this entire time they have fought and are still fighting our battles. The British fleet, the immovable lines in France, the wavering lines of Italy and of stricken Russia are now protecting the physical integrity of this Nation. In my humble judgment, based upon the trend of world events as I have gleaned them from unofficial channels, victory will not be in sight until more than 10,000,000 American soldiers have entered the conflict, and until all the resources of individuals and corporations—as well as of the Nation—are fully and efficiently utilized. If America does, in proportion to population, half as well as England, we will have 8,000,000 or 9,000,000 men under arms within the next three years.

The foregoing indicates but a part of the task that lies before us. Though the bald facts are far from reassuring, there is every reason to expect a successful outcome. The end of the war will be hastened just in the proportion as every man, woman and child does his full duty in aiding the Government to use most effectively the four things which will determine the issues of war: brain, man power, money and material resources. The Commander-in-Chief of the Army and his advisers are preparing to utilize these resources and forces most speedily and effectively. In an early message the President urged every citizen to do his part to the fullest. That means that every man, woman and child in the Nation must do—for the common good—the utmost for which his talents and possessions fit him. We must not only avoid extravagance and waste, but we must deliberately conserve those things which may be useful in warfare. The hand of Providence is clearly seen in providing for us at this time a leader showing the strength, breadth, integrity and vision of the President. Silently, but with masterful swiftness and precision, the members of the Cabinet have assumed their new burdens with complete unity of purpose. No other Cabinet has stood the acid test of this war without a break. Congress has ungrudgingly provided for such sinews of war as the task may require.

In order to supplement the facilities of existing Governmental departments for the task of guiding the Nation aright, new policies have been outlined, new plans made, new laws passed, new offices and commissions created and new regulations formulated. The amplified agencies have been correlating and utilizing the forces and resources thus conserved. Chief among the newer agencies are the Council of National Defense, with its many ramifications; the Shipping Board; the Food and Fuel Commissions and the National Council of Research.

As you know, the Council of National Defense is composed of six members, as follows: the Secretary of War, the Secretary of the Navy, the Secretary of Agriculture, the Secretary of the Interior, the Secretary of Commerce, the Secretary of Labor, with which acts a commission of seven advisory members, namely: Mr. Daniel L. Willard, representing transportation; Mr. Bernard M. Baruch, representing raw materials; Mr. Howard E. Coffin, representing manufacturing and industrial relations; Mr. Julius Rosenwald, representing supplies for the use of the Army; Mr. Samuel Gompers, representing the varied problems of labor; Dr. Hollis Godfrey, representing engineering and scientific problems; and Dr. Franklin H. Martin, representing co-operative medical problems.

It is manifestly impossible to refer, even briefly, to all or to any considerable part of the activities of the Council of National Defense, though a few of its achievements may be of interest.

So completely was the railroad situation in hand that within three days from the declaration of war 262,000 miles of railroad were voluntarily placed under the unified control of a board consisting of five men. The avowed policy of the railroads is to give Government requirements the right of way. All of the roads of the country have, therefore, been practically turned over to the Government, for the period of the war.

Mr. Rosenwald has placed the resources of his department at the disposal of the Purchasing Departments of the Army and Navy, and has aided in finding sources of supply and in securing minimum prices for hundreds of millions of yards of cotton and woolen goods, for millions of pairs of shoes and for a great variety of other articles. By cautious inquiry and action, serious disturbance of markets has been avoided and millions of dollars have been saved.

Because of his intimate knowledge of metals, chemicals, raw materials, etc., Mr. Baruch has been able to secure favorable prices on those commodities, thereby saving hundreds of millions of dollars to the country.

By disclosing to honest, loyal labor the enemy intrigues, by pointing out the patriotic course to pursue, and by his continuous solicitude for safe, healthful working conditions, Mr. Gompers has done much to increase the productive capacity of the Nation.

Mr. H. E. Coffin, the guiding genius of industry, has immortalized himself by each of many contributions, notable among which are his early inventory of the industries of the country, his advice in the creation of the Council of National Defense, his work on the General Munitions Board, his part in creating and financing the Air Craft Production Board, and many other activities.

The General Munitions Board did its most effective work by aiding the Purchasing Departments of the Government in finding adequate productive capacity for the vast needs of the fighting forces and by securing contracts and sources of lumber and other materials for the completion of the sixteen cantonments within approximately ninety days.

The Air Craft Production Board started with antiquated models of machines and with practically no facilities for production. Today one concern turns out every twenty-four hours enough 12-cylinder engines for sixty high power aeroplanes. The parts are all interchangeable, so that from two or three damaged machines one or two new ones may be rebuilt.

The Automotive Committee has found practically unlimited productive capacity for trucks of standard make and of interchangeable parts.

The War Industries Board, with legal authority, has continued and extended the work which the General Munitions Board did by the sheer genius of Mr. Frank A. Scott. The illness which forced Mr. Scott to resign from the Chairmanship of the War Industries Board has caused a serious loss to the Nation. The War Industries Board has assumed, and is getting well under way, the Herculean task of learning the productive capacity of every important plant of every industry in the Nation, and of advising the departments of Government where they can place their orders at moderate cost and with greatest speed in production. The Priorities Division of the War Industries Board decides upon the order of precedence by which contracts are filled. This includes Allied, Governmental and industrial orders.

Dr. Godfrey's energies have been devoted largely to co-ordinating the activities of scientific and engineering institutions, organizations and resources.

The medical activities, under the guidance of Dr. Franklin H. Martin, have been directed chiefly toward an effort to bring the civilian medical resources of the Nation to the aid of the Surgeons-General of the Army, Navy and Public Health Service and of the Red Cross, through the agencies of the General Medical Board, the state and county committees of the Council of National Defense, the fifty-eight National medical organizations, the state, county and other local medical associations, the medical schools and hospitals of the county and many other agencies. A further attempt has been made to aid in readjusting important civilian medical activities to war needs without disrupting such important institutions as medical schools, hospitals, etc. In this work, the Medical Section has acted in a purely advisory capacity, without the power or the desire to exercise any executive authority.

It has been a source of the greatest possible pleasure and the greatest pride in American men and institutions to see the way in which the Medical Departments of the Army, Navy and Public Health Service have expanded so splendidly and without a creak or the slip of a cog under the guiding genius of their respective Surgeons-General. Time forbids details, yet I can not refrain from calling attention to

the fact that while there were only three divisions and five officers in the office of Surgeon-General Gorgas when war was declared, his department now comprises twenty-two divisions and very nearly 200 officers. The five rooms of early April have grown to one eight-story office building, one four-story double apartment building, and a smaller building. The high character of its personnel and the efficiency of his department are even more extraordinary than the degree and the smoothness of expansion.

As individuals, and through the medium of our state and county committees and of the great National, state and local medical societies, a great army of medical men and women have co-operated splendidly with the Surgeons-General and with the Council of National Defense, to the end that there are now commissioned about 18,000 medical men in the service of the Army and the Navy.

All honor to the men who have rendered such signal service at home and to those who have heard and heeded the call to colors, having, by that act, made great personal sacrifice and signified their willingness to brave any danger by which they may be confronted!

With the activities of the Food and Fuel Commission we are becoming, daily, more fully acquainted. However much or little we may contribute in other ways, it is not only an opportunity, but our imperative duty to become fully familiar with the desires of the Food Commission and to comply with them in every possible way.

Finally, notwithstanding the fact that the task is great, the country is being rapidly transformed from an incoherent mass of 115,000,000 virlie, versatile individualists into a unified Nation consecrated to the cause of humanity and resolved to continue the struggle until liberty shall be the heritage of the nations of the earth.

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*On active duty, Medical Reserve Corps, U. S. Army. Granted leave of absence for period of war.

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EDITORIAL DEPARTMENT

AN EXPLANATION AND A TRIBUTE

The readers of the JOURNAL, while admiring the patriotic motives and the self-sacrifice on the part of Dr. Seale Harris in giving up, for a time, an enviable practice to enter the Medical Reserve Corps of the U. S. Army, at the same time will deeply regret to learn that his duties in charge of the gastro-enterological work in the Division of Internal Medicine in the Office of the Surgeon-General, will temporarily prevent his continuing in the capacity of active Editor of the JOURNAL and Secretary-Treasurer of the Southern Medical Association. In consequence of this fact, at the Memphis meeting, Major Harris tendered his resignation to the Association, which unanimously refused to accept it, but instead retained him in both positions, granting him a leave of absence for the period of the war, and selected two substitutes for the continuance of his work while he is away.

The JOURNAL staff fully appreciates the present loss of its irreplaceable Chief whose genial nature, breadth of vision, sound judgment, wise counsel, and facile pen have endeared him to their hearts while at the same time winning for him a foremost place in the ranks of medical journalists. No man in the Association is better known nor more universally beloved than he.

Some of the best years of his life have been spent in the upbuilding of the Association, which, while founded by Doctors Martin, Savage, Dowling, Crawford, Crook and others, was nurtured by him in its infancy, nursed by him back to strength when almost overcome by weakness, and often saved by his sharing with it his own sustenance, which at times very seriously drained his personal resources. He has served the Association and JOURNAL without salary. No man can overestimate what the Association really owes to Major Harris.

We, the present Editorial Staff, desire this opportunity of paying this mild tribute to his ability and character, to release him from any responsibility for our feeble efforts while he is away, and to crave the indulgence of our readers for the many shortcomings which may be only too often observed in these pages in the future during the absence of our experienced and beloved helmsman.

THAT MEMPHIS MEETING!

It is now a matter of history, that Memphis meeting,—an incident of history that will long echo in the memory of those who attended, and will be narrated and renarrated by them to those at home so unfortunately situated as to be forced, for various reasons, to remain away. From the time the small vanguards began to arrive on Sunday preceding the meeting and the chairmen's gavels, on Monday morning, sounded the opening of the Sections on Pediatrics, Railway Surgery, Malaria and Medical Education, until the newly elected president, Dr. Barker, formally dismissed the meeting at noon Thursday, the hours were taken up with scientific papers on live subjects interspersed with recesses for meals, relaxation, the renewal of old

acquaintances and the formation of new friendships.

Memphis, as the host city, was true to tradition and more than lived up to her promise of an enjoyable time for those who would attend, as evidenced by the expressions of satisfaction which were heard on all sides. The local committee on arrangements adequately prepared for the comfort of their guests and provided very satisfactory meeting places for the general sessions and for the section work. The local Committee on Entertainment, while respecting the request of the Association relative to elaborate and frequent social functions, bestowed upon their visitors, both ladies and gentlemen, many courtesies and provided many delightful hours for all.

As had been announced beforehand, the gathering turned out pre-eminently a "war convention," a fact that was easily discerned from the numbers of olive drab-clad men present, from the singing of patriotic songs at the public and general sessions and from the numerous papers, lantern slide and motion picture demonstrations on military problems. Unquestionably there were present more outside celebrities this year than ever before. There were the distinguished representatives of the British Army Medical Corps, Colonel Goodwin, and of the French Medical Corps, Colonel Dercle, skillful military surgeons and inspiring officers, who are placed in an advisory capacity, by their respective governments, in the office of the Surgeon-General of our Army. They brought messages of good will and encouragement from their people to ours, explained how certain of their early mistakes could be avoided by us and gave the audiences a clearer understanding of the difficult problems facing their countries and an insight into the wonderful morale of our Allies.

Our own Army had such well known men present as Colonel G. E. Bushnell, Chief Assistant to the Surgeon-General; Colonel W. O. Owen, Curator of the Army Medical Museum; Colonel Robert E. Noble, Chief of Personnel Division of the Surgeon-General's Office; Colonel Henry Page, commanding the Medical Officers' Training Camp at Fort Oglethorpe; Lieutenant-Colonel R. M. Blanchard; Lieutenant-Colonel C. H. Connor, Chief of the Medical Section of the American Red Cross; Major E. G. Brackett, Chief of the Division of Military Orthopedics of the Surgeon-General's Office; Major Frank F. Simpson, Chief of the Medical Section, Council of National Defense; Major J. C. Bloodgood, Chairman, Preparedness Committee of the Southern Medical Association; Major John Wesley Long; and many others.

The various section officers provided instructive and timely subjects for their programs and are to be congratulated upon securing such an array of prominent essayists for the presentation of theses and orations. The registered attendance of 1,476 is, indeed, remarkable during war times when so many doctors are in the training camps and when so many civilian physicians are doing "double duty" at home.

For the first time in the history of the Association it created honorary life members, selecting for that purpose Colonel Goodwin and Colonel Dercle, of the British and French Medical Corps, respectively.

To the Shelby County and Memphis Medical Society, to the daily press, to the Chamber of Commerce, and to all other civic bodies which so cordially contributed to the success of the meeting, the warmest thanks of the Association are due for their many courtesies.

The Memphis convention has been pronounced by a distinguished Army officer "the greatest medical meeting I ever attended."

It *was* a great meeting. It showed that the physicians of this section, while perhaps feeling the financial brunt of the war as keenly as any region of the country, are none the less interested in the advancement of scientific medicine and in learning from the War Department its purposes and needs in the great struggle that they may the more intelligently render efficient service.

OFFICERS FOR 1918

The officers elected for the ensuing year are as follows:

President
Dr. Lewellys F. Barker, Baltimore, Md.

First Vice-President
Dr. William H. Deaderick, Hot Springs, Ark.

Second Vice-President
Dr. T. C. Holloway, Hazard, Ky.

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Dr. M. Y. Dabney, Birmingham, Ala.

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Section on Pediatrics
Dr. L. T. Royster, Chairman, Norfolk, Va.
Dr. J. D. Love, Vice-Chairman, Jacksonville, Fla.
Dr. L. W. Elias, Secretary, Asheville, N. C.

Section on Public Health
Dr. L. B. McBrayer, Chairman, Sanatorium, N. C.
Dr. Henry Boswell, Vice-Chairman, Magee, Miss.
Dr. W. L. Heizer, Secretary, Frankfort, Ky.

Section on Surgery
Dr. Jere L. Crook, Chairman, Jackson, Tenn.
Dr. L. H. Landry, Vice-Ch'man, New Orleans, La.
Dr. John R. Caulk, Secretary, St. Louis, Mo.

Section on Eye, Ear, Nose and Throat
Dr. E. H. Cary, Chairman, Dallas, Tex.
Dr. J. A. Stucky, Vice-Chairman, Lexington, Ky.
Dr. W. T. Patton, Secretary, New Orleans, La.

Southern States Association of Railway Surgeons
Dr. I. W. Cooper, President, Meridian, Miss.
Dr. W. A. Chapman, Vice-Pres., Cedartown, Ga.
Dr. Ambrose McCoy, Secretary, Jackson, Tenn.

*On active duty Medical Reserve Corps, U. S. Army. Granted leave of absence by Association for the period of the war.

PRESIDENT LEWELLYS F. BARKER

Had the Association sought for one year and debated the matter for another twelve months it could not have settled upon a more suitable man for the 1917-18 Presidency than Professor Lewllys Franklin Barker, of Baltimore.

Dr. Barker, although a Canadian by birth, has lived in the United States so long and has been surrounded by Southern influences for so many years, that we may rightly look upon him almost as one of our own sons.

He is fifty years old,—that half century representing many hours of diligent search for medical truths. Few internists have ever had his thorough and varied training for the exact work of diagnosis, and none ever availed himself of his opportunities for study with more industry than he. In 1891, at the age of 24, Dr. Barker came to the Johns Hopkins Hospital in the capacity of Assistant Physician. He had been graduated in arts from Pickering College, Ontario, in 1884, and in medicine at the University of Toronto, in 1890. The following year, 1890-1891, was spent as House Officer in the Toronto General Hospital.

After a few years in clinical medicine, he went over to the Department of Pathology at Johns Hopkins as Fellow, and remained as such from 1892 to 1894. From 1894 to 1897 he was Associate in Anatomy, being particularly interested in Neurology. From 1897 to 1899 he was Associate Professor of Anatomy. During 1899 and 1900 he was again connected with the Department of Pathology. In 1900 the University of Chicago tendered him the Chair of Anatomy, which he filled 'til 1905, when he was recalled to Johns Hopkins as Professor of Medicine on the departure of Dr. William Osler to Oxford. His present title is that of Professor of Clinical Medicine.

Dr. Barker is a man of superb mentality, of rare training, and of the most win-

ning personality. His membership in learned societies, both American and foreign, embraces a long list. Besides these distinctions he received an honorary M.D. from the University of Toronto in 1905; an L.L.D. from Queen's University, Kingston, Canada, in 1908; and from McGill University, of Montreal, in 1911.

Among his earlier contributions to medical literature are his "Laboratory Manual of Human Anatomy" and his Translations of Werner Spalteholze's "Hand Atlas of Human Anatomy." Since then his writings for various publications have covered a wide range in science. His "Monographic Medicine" is a masterpiece of thoroughness.

Today he is without doubt America's foremost man in internal medicine, a position which his brilliant mind, indefatigable zeal and exceptional training very justly entitle him. His clinics have become famous for their absorbing interest.

The Association, in electing Dr. Barker to the greatest office in its gift, but echoed the feeling of high regard which its members have for him, and in honoring him, in no small degree honored itself.

MOBILIZING THE MEDICAL PROFESSION

The time is approaching rapidly when every resource of this country will be needed if we, with our Allies, hope to win the war. In order to mobilize the entire resources of this democratic country all the people must understand that we are not fighting for our Allies, but with them, to protect our own country from invasion, and to save our wives, daughters and other loved ones from the fate of the women and children of Belgium, France, Serbia and Poland.

The statements of Ambassador Gerard that the Germans had planned, after conquering France, Russia and England, one at a time, to overrun South America and then to take the prosperous and peace-loving United States, have been verified by our Minister to Switzerland, Hon. Pleasant A. Stovall, of Savannah, Ga., who was recalled recently to Washington for a conference with the President. When physicians, as well as all other classes of people, appreciate the fact that we are fighting for life, then may we expect the necessary resources with which to win the war, placed in the hands of our Government.

The man-power of the medical profession, more than that of any other class, is needed in war; and never in history has any set of men responded more nobly to the call for service than have the physicians of the United States in this crisis. The medical profession, however, will be called upon for more, and even greater, sacrifices before our Armies can be victorious over those of a nation whose expansion and development for centuries have been due to military prowess, and which has been preparing for forty years to conquer the world by force of arms.

The necessity for mobilizing the entire medical profession to conserve the health and lives of our soldiers, as well as of the civil population, was discussed at the recent meeting of the Southern Medical Association by Lieutenant-Colonel Robert E. Noble, who next to Surgeon-General Gorgas is best prepared to tell of the needs of the Medical Department of the Army. Colonel Noble did not mention his own work as Head of the Personnel Division of the Surgeon-General's office during the increase from less than 600 medical officers to more than 15,000 in a little more than half a year; but those who know, marvel at Colonel Noble's wonderful faculty for getting and remembering the details of the thousands of applications for commissions in the Medical Reserve Corps of the Army that have passed through his hands.

After paying a tribute to the patriotism of the medical profession, Colonel Noble spoke of the opportunities to physicians for service, not only in treating the sick and wounded, but in the reconstruction of the crippled so that they may be able to take up new vocations, in order that they might become self-supporting.

The plan for mobilizing the entire medical profession as suggested by Colonel Noble, which is published in this number of the JOURNAL, whereby each man may be used for the particular place that he is best qualified to fill, provides as much for the adequate care of the sick among the civil population as for the medical needs of the Army. He suggests that every practicing physician in the United States should be commissioned in the Medical Reserve Corps of the Army; and that boards composed of specialists, and of members of the profession in each state, select men for military service and also decide who are best fitted to provide for the medical needs of civil communities.

According to the present plan some communities are left without physicians; medical colleges, which are needed more than ever before, have been deprived of many of their ablest teachers; hospitals have lost almost their entire staffs, and public health activities have suffered, because medical men fired with patriotism, and realizing the great need for surgeons in the Army, have felt it their duty to volunteer for military service; and their places in civil life have not been filled. This state of affairs exists when only 10 % of the physicians have asked for commissions. Therefore, the individual volunteer system, when physicians are called upon to care for the sick and wounded of five or ten million men, would not provide the best medical service for our soldiers or for our civil population.

The individual can not always decide best where his duty lies. Some are in the Army who are needed more at home, while many continue in private work when they should be in military service. Colonel Noble's plan for the whole medical profession to be voluntarily enrolled in the Reserve Corps would provide best for the medical needs of the Army, and it would prevent physicians from feeling like "slackers," or being regarded as such when they continue in private work.

Every physician in the United States commissioned in the Medical Reserve Corps, and each wearing the uniform of an Army officer, ready to serve in the place for which a board of his peers thinks he is best fitted, is the fairest plan to mobilize the medical profession, and the most efficient method to provide an adequate medical department for the Army, while at the same time caring for the medical needs of the entire country. It is a simple but a wonderful plan, one that should be adopted voluntarily by the medical profession without the predicted conscription of all the doctors in this country, as has been done in England.

THE COMPENSATIONS OF WAR

The medical profession is being called upon not only to give its best men in all lines of work for military service, but in numbers, it is estimated that the 15,000 physicians who have voluntarily given up their private work to respond to the call of duty, represent more than 20 % of the reputable available medical men under 55 years of age. Twice that number will probably be called out within a year.

As Colonel W. O. Owen said at the recent meeting of the Southern Medical Association, "money could not buy the service that has been given the country by the medical men now in the Reserve Corps"; but their combined annual income in civil life amounts to many million dollars more than the Government pays them. Doctors, however, do not hold dollars above conscience, nor do they feel that money is

everything in life; they serve efficiently, faithfully and cheerfully without considering the monetary returns.

In spite of the pecuniary loss, the discomforts, and even dangers, that may come from military service there is no question but that the medical profession, as a whole, will in many ways be the beneficiary from its part in the dreadful war that has been forced upon us. Indeed the compensations seem to overbalance the cost.

In civil life no class of men has greater cares or more trying responsibilities and none are more overworked than doctors. As a result there are many physical and mental wrecks among physicians; and statistics show that they have a higher death rate than other professional men. The outdoor life, the physical training, the regular hours and the freedom from the demands and responsibilities of private practice have improved the health, and will no doubt add years to the life of the average physician who is so fortunate as to be in military service.

Colonel Munson says that it is usual for the stout to reduce and for the thin ones to take on flesh after a few months of military training; and the improvement in appearance of the physicians in the Army has often been remarked upon. A prominent specialist, who gave up a practice of from $30,000.00 to $50,000.00 a year to serve in a cantonment hospital on a salary of $3,000.00 a year, recently said that he "never really enjoyed life more," that he "would not take anything for his experience," that he was "just learning how to live." Most other men who have been in the service for a few months express similar opinions.

After this war the medical profession will be better educated, and better organized; its members will be more charitable toward one another; they will do better team work; and they will be better equipped in every way to practice medicine and surgery, including all the various specialties, than would have been possible under any other circumstances.

Medical science will be advanced and medical history will be enriched as never before by the team work of the trained officers of the Army and Navy working with the best brains and talent of civilian doctors for the proper care of our sick and wounded soldiers. Army surgeons will take advantage also of the wonderful opportunities for original investigation and research work; and out of this war will come many advances in medicine and surgery, just as the discovery of Walter Reed, and the achievements of Gorgas, the brightest pages in the history of American medicine resulted directly from the Spanish-American War.

Another important result of military service is that many thousand physicians who know little of preventive medicine, as a result of their Army experience, will become trained sanitarians. On their return to civil life they will not be satisfied with the sanitary conditions that exist in their home cities, towns, counties and states; and they will lead movements for public health improvement that will spread over the Nation; and—mark the prediction—one of the results of the war will be an adequate National Department of Health, with a sanitarian in the President's Cabinet, which will accomplish for the United States what was achieved in the Canal Zone; and we shall have the healthiest, the happiest, the most efficient and the longest-lived people that has ever existed on the earth.

Verily, even war has its compensations, and the medical profession in "serving best will profit most."

THE BURNING QUESTION

There are thousands of physicians who are trying to decide whether their duty lies in the Medical Reserve Corps or in private practice. It is a question for each

to settle for himself, and no one should judge harshly any man who feels that he can serve his country better at home. There are often reasons why a physician can not offer his services that are not known to others; and it often requires more courage to decide not to go than it does to join the crowd who are in service.

It is, however, the DUTY of every physician under 55 who has no physical disability and who has not obligations that make it absolutely necessary for him to remain at home, to offer his services to the Surgeon-General. If it is so that he can not serve now he should state when he is willing to accept a commission.

The JOURNAL would not be understood as trying to influence any physician to join the Medical Reserve Corps, because it is a question for the conscience of each individual. We believe that the best course for those who are physically able and professionally qualified is to ask for a commission and state the facts in the case, leaving it unreservedly to the discretion of the Surgeon-General when they will be ordered into the service.

A frequent mistake is to ask for a commission, expecting to be called out in a day or two and give up practice. It is sometimes weeks or even months after a commission is issued before a physician is called into the service. After receiving his commission a physician should continue in practice until he is notified by the Surgeon-General that he will soon be called out. The fact that one has a commission is proof of his patriotism; and if he is not ordered on duty for weeks or months, or not at all, it can not be said that he is shirking a responsibility.

The physician can calculate what he will lose by joining the Medical Reserve Corps, but often he loses sight of the advantages of serving. There appeared in the September number of the JOURNAL an editorial which deals with the benefits that come from army work. By request it is reproduced below:

THE EMOLUMENTS OF MEDICAL MILITARY SERVICE

This JOURNAL and others have made many appeals to the patriotism of physicians to join the Medical Reserve Corps of the Army and Navy, and much has been said about the sacrifices that have been, and are being, made by the members of the medical profession in their desire to serve their country; and the altruistic spirit shown by medical men in the present emergency proves that they are living up to the obligations and opportunities of one of the noblest of professions. There is, however, another side to the question, because in giving his services to the Reserve Corps of the Army or Navy the physician receives many things that at least partially compensate for his sacrifices. It, therefore, may be advisable to discuss the emoluments of military service, or what some may call the selfish viewpoint.

It is undoubtedly true that the great majority of physicians are making financial sacrifices to accept commissions in the Army. The man who earns $10,000.00 a year and upward usually allows his family to live on a plane that makes it seem impossible for them to exist on the salary of a medical officer in the Army; and in order to serve, many physicians and their families have given up handsome homes, automobiles, fine clothes and other luxuries. This training in self-denial in itself is worth something to a man and his family, particularly to his children, who are sometimes ruined by a life of ease and luxury.

The salaries of medical officers in the Army range from $2,000.00 per year for a first lieutenant, $2,400.00 for a captain, to $3,000.00 for a major; but most of it is net—no office rent, no automobiles, no assistants, no stenographer, no servants and no other expenses incident to the practice of medicine and sugrery. Some physicians have complained that they can not live on these salaries and pay their life insurance, but insurance premiums will be taken care of by the companies during the period of war.

The medical officers of the regular Army, and their families, have lived comfortably on these salaries for many years. The JOURNAL is not arguing that it is sufficient compensation for the services of high-class physicians in the Army or for those who are volunteering, but merely mentions it as a fact that by practicing rigid, or even reasonable, economy, a family can live on the salary of a medical officer in the Army or Navy.

Aside from the opportunity to serve in a patriotic cause, what does the Army give in return for the sacrifice?

The Army, with its training camps and the opportunity for experience, not only in treating wounds, but in all the various branches of medicine and surgery, is the greatest post-graduate medical school in history. In general surgery, orthopedic surgery, plastic surgery, neurology, roentgenology and ophthalmology and in many other specialties the leading experts in the country are giving their time to training physicians for Army work.

In most post-graduate medical schools the physician only sees the work of others, but in the

Army he will have the opportunity to study and treat the cases himself, whether operative or otherwise; and at the same time have the privilege of consulting with the best medical talent in the world. There is not a physician, whether he be a general practitioner, a surgeon, or a specialist in any line of work, who enters the Army who will not come out of it better prepared to practice his profession.

The prestige which Army service gives to physicians will be worth much to them after the war is over. Doctors who refer patients to specialists, and laymen as well, understand the educational advantages of the Army. A banker recently said to the writer: "The doctor who goes to the war will have a great advantage over those who remain at home, because he will have had such a vast experience in treating the sick and wounded, and he will, therefore, be better prepared to look after his patients when he returns to his practice."

The people of a country that goes into war with no selfish motives, but for the noble purpose of fighting for democracy and for fair dealing among all nations, will appreciate the patriotism of the men who serve for them. The way in which the soldiers who served in the Civil War have been treated suggests what may be expected after the present war ends. After the war, the veterans were given the choice positions in all walks of life. Senators, congressmen, governors and all public officials down to bailiff, who were elected by popular vote, for thirty or forty years, came from the ranks of veterans.

The doctor, while not in politics, is dependent to a great extent upon personal popularity, and Army and Navy surgeons after this war will be favored in many ways. All of us know how we looked up to and revered the veterans, the men who wore the gray, or the blue, as the case may have been, and after this war is over it will be pleasant to think that we may be so respected by our friends and their children.

One eminent physician who is over age facetiously remarked that "after the war the fellows who went will do all the talking, while those who stayed at home will not have anything to talk about." There is no question that the men who serve in the Army will be drawn together by strong ties, that they will be looked up to and revered as patriots, and that through the veterans and other organizations they will fomr a select class which will be envied by those not so fortunate.

A prominent internist said that the impelling thought with him in deciding to enter Army service was "What can I say when my boy or girl asks, 'Daddy, why did you not go to the war?'" For a man's own self-respect, and to hold that of his family, and to maintain the esteem and confidence of his friends, it is worth while making the sacrifice to go to war. The public, generally, understands the great need of physicians for the Army, and the sacrifice of those who go will be appreciated; while those who ought to go, and who do not, will lose the respect and confidence of their clientele.

A very good reason for entering the Reserve Corps now is that those who have had the training in the medical officers' schools, or who have had experience in the various Army hospitals, will be given, and rightly so, the most desirable appointments, and preference in promotion.

The patriotic motive is enough to make physicians give up the comforts of home and the emoluments of a successful practice; but it is also well to consider what some may call the practical side of the question, or what others call the cold selfishness of the situation . Whatever may be the impelling cause for the one to enter the Reserve Corps of the Army or Navy, in many ways he will be the gainer by joining the ranks of patriotic physicians who give up many things to serve their country; but in so doing, they gain much that is satisfying to the human heart, and much that will make for success after victory has been achieved.

THE RANK OF MEDICAL OFFICERS

It would surely seem that medical officers of equal age, attainments, authority and length of service should have the same rank as those in the line of the Regular and National Armies. Yet such is not the case.

In an infantry brigade there is one brigadier-general to 160 line officers, and in the field artillery one brigadier-general to 127 officers. This does not include the major-generals. In the Medical Corps there is at the present time only one brigadier-general to each 2,100 officers.

There are fifty or more major-generals among the line officers, yet the only surgeon ever given that rank is Major-General Gorgas, and then by special act of Congress in recognition of his epoch-making achievements in the sanitation of the Canal Zone. Certainly no Major-General in the Army has a more responsible position than the Surgeon-General. He has under his immediate command and care more officers and more men than any other general officer in the service, with the one exception of the general in command of the entire Army.

Allowing 10 medical officers for each 1,000 commissioned officers and enlisted men will give us 20,000 medical officers for 2,000,000 men—the French experience shows that more than this will be needed.

We need at least one dentist to every thousand officers and men, or 2,000 dental officers; we need 2,000 veterinary officers; and we need 2,000 sanitary officers, or a total of 26,000 commissioned officers for 2,000,000 men.

In the Medical Department of the Army, including the enlisted men of the Ambulance, Hospital and Sanitary Corps, there is authorized at present a personnel of 10 per cent. of the total enlistment. This is 200,000 men for an army of 2,000,000. The experience of the British Army has shown that we shall need, in order to take proper care of our sick and wounded, a number of beds equal to 25 per cent. of the total number of men in our Army. This means 500,000 beds for an army of 2,000,000. Experience has taught that at least one nurse to every ten beds must be allowed. This will mean 50,000 nurses for 500,000 beds. Twenty-six thousand officers, 200,000 enlisted men, 50,000 female nurses is 276,000 in personnel before we have considered any sick or wounded men, all of whom must be cared for and provided for by the Surgeon-General. This, with 500,000 patients, makes 776,000 men and women that this man with the grade of Major-General is supposed to care for, and when the present incumbent has ceased to occupy the office it becomes a brigadier-generalship.

Of these 26,000 officers in the Medical Department of the U. S. Army, 444 was the number in the Regular Service a short while before this war commenced, and at that time, if the JOURNAL is correctly informed, there were less than 700 commissioned officers in the Medical Department of the Army, including dentists and veterinarians. Twenty thousand of the 100,000 available physicians in the United States have been commissioned into Army service; and one Brigadier-General is the allowance made for such patriotism.

This discrimination against medical officers has become so apparent that one of the ablest statesmen of the Nation, Senator Owens of Oklahoma, author of the Federal Reserve Bank Act, which many regard as the greatest piece of constructive legislation of the century, has introduced a bill in the Senate which, though it does not place the rank of medical officers on the same scale as the line officers, it, to a great extent, does away with the injustice to the splendid surgeons in the regular Medical Corps and the patriotic physicians in the Medical Reserve Corps.

This bill will probably increase the rank of the Regular medical officers more than those in the Reserve Corps. This they deserve. In the first place there are no higher types of gentlemen, nor are there men of greater attainments, whether they are West Pointers or graduates of other professional schools, then the physicians—usually the best prepared men in the leading medical schools—who won their places in the Army by competitive examinations. They paid for their own education, and they have given the best years of their lives to the Army. They are as well prepared for the higher or administrative ranks in the Medical Department as the line officers are for the duties of the most important positions in the Infantry, Cavalry or Artillery; and Congress should see that their services are rewarded and their attainments given the proper recognition.

Neither have the officers of the Medical Reserve Corps been given the rank which they deserve. When one considers the sacrifices that have been made in order to serve their Country in this great crisis by men like Crile, Finney, McGuire, the Mayos, Martin, Janeway, Thayer, Pepper, Elliott and thousands of other physicians in all the various specialties in medicine and surgery, and recalls that the highest rank which can be given them is Major, while Brigadier-Generals, Colonels and Lieutenant-Colonels by the score were mustered in among the line officers of the National Guard, the injustice is startling.

The medical profession of the United States should let our Senators and Congressmen know that we feel this discrimination; that more than 100,000 of the most influential citizens of our Country desire to see this wrong righted; and that hundreds of the constituents of each Senator and Congressman are interested in the passage of the Owens bill.

HISTORICAL NUMBER OF THE KENTUCKY MEDICAL JOURNAL

Dr. J. N. McCormack, Editor of the *Kentucky Medical Journal,* journal of the Kentucky State Medical Association, is to be warmly congratulated upon the unique donation he has made to the American medical literature in presenting to the profession "The Historical Number" of that journal (November 1, 1917, Vol. XV., No. 11), under the caption of "Some of the Medical Pioneers of Kentucky." This issue is most attractive and complete in all of its appointments, reflecting great credit upon those compiling the exhaustive data relative to the lives and works of such men as the McDowells, Samuel D. Gross, Cowling, Sayre, Dudley, Drake, Cooke, Yandell, Bodine, Austin Flint, Samuel M. Bemiss, Sutton, and others of equal prominence.

The intrinsic value of the issue is apparent and the work is an inspiration to the members of the present-day profession, who have manifold handicaps over those distinguished, able pioneers of medicine who immortalized and endeared themselves to the entire medical fraternity, but especially to the profession of the Southland.

Those who have seen the issue, in its original offering, readily recognize its value in the library and, therefore, it will be gratifying to physicians throughout the South to know that "arrangements have been made to put this volume in handsome binding * * * for the use of all members who may desire to incur the small personal expense necessary to enable them to possess and transmit it in this permanent form as a heritage."

IN MEMORIAM
DR. FRANKLIN PAINE MALL

Dr. Franklin Paine Mall, Professor of Anatomy at the Johns Hopkins Medical School, Baltimore, Md., and one of the leading anatomists of this country, died at the Johns Hopkins Hospital on November 17. His death was due to complications following an operation which he underwent the latter part of October for acute cholecystitis and cholelithiasis.

Dr. Mall was born in Belle Plaine, Iowa, September 28, 1862. He graduated from the University of Michigan in 1883, and shortly thereafter went to Germany, where he engaged in post-graduate work and research study, particularly in the field of embryology. Returning to this country, he became a fellow and instructor in pathology at the Johns Hopkins University in 1886. In 1889 he went to Clark University, where he served as Adjunct Professor of Vertebrate Anatomy until 1892. He then went to the University of Chicago as Professor of Anatomy, where he was allowed to remain only one year before being induced to accept the Chair of Anatomy at the Hopkins in 1893, which position he held until his death.

Dr. Mall was an indefatigable research worker and a prolific writer. His numerous contributions in the domain of human anatomy and embryology are of inestimable value and of the highest scientific excellence. In recognition of his work in embryology, the Carnegie Institute at Washington was established in 1915, with Dr. Mall as Director. His collection of human embryos, both intact and serially sectioned, which are available for study at his Hopkins laboratory, is the finest and most complete in existence.

His anatomical laboratory set a new

standard in this country for thoroughness, orderliness, and the conspicuous absence of uninviting features. Moreover, he was an inspiring teacher and director of research work, and a number of his pupils are now occupying professorships of anatomy at various universities in this country.

In the death of Dr. Mall not only the Hopkins Medical School, but also the scientific world, has suffered an irreparable loss.

MEDICAL RESERVE OFFICERS

Names and Home Addresses With Rank of the Physicians in the States Comprising The Southern Medical Association Who Have Been Commissioned in The Medical Reserve Corps of the United States Army up to about October 1st, 1917

ALABAMA

Abernathy, Floyd Lamar, Flomaton, 1st Lieut.
Adams, Benj. Franklin, Fulton, Lieut.
Agnew, James Howard, Mobile, Captain.
Allen, Walter Earl, Ward, Lieut.
Armistead, John Robert, Jackson, 1st Lieut.
Arnold, Moody Warren, Florence, Lieut.
Athey, Clanton Ray, Ramer, Lieut.
Austin, Burton Forsythe, Chancellor, Lieut.

Baker, James Norment, Montgomery, Major.
Banks, Joseph Todd, Dadeville, Lieut.
Barnett, Thomas Meriweather, Dothan, Lieut.
Bean, James Robbin, Birmingham, Lieut.
Bean, Walton L. Andalusia, Lieut.
Beard, James Wiley, Troy, Lieut.
Bell, John M., Eufaula, Lieut.
Belue, Julius Orville, Rogersville, Lieut.
Blair, Wm. Martin, Gantt, Lieut.
Blake, Theodore Miller, Fruitdale, Lieut.
Blue, James Howard, Bessemer, Lieut.
Bogart, William McMahon, Stevenson, Lieut.
Bondurant, Engene DuBose, Mobile, Maj.
Bowman, James Luther, Union Springs, 1st Lieut.
Boyd, Austin Francis Jefferson, Emelle, Lieut.
Bradford, Duke Constantine, Birmingham, Lieut.
Brasfield, Chas. Wm., Linden, Lieut.
Brown, Robert Dwight, Mobile, Capt.
Bryars, Jesse Floyd, Eliska, Lieut.
Buford, Robert King, Owens Cross Roads, Lieut.
Burns, Wm. Wilkes, Selma, Lieut.

Cameron, Andrew Crozier, Birmingham, Lieut.
Cammack, Kossuth Rothschild, Evergreen, Lieut.
Campbell, James Alonzo, Altmore, Lieut.
Clark, Wm. Arthur, Albany, Lieut.
Coffee, William Milton, Bessemer, Lieut.
Cogburn, Harry Reginald, Bayou La Batre, Lieut.
Cole, Herbert Phalon, Mobile, Major.
Conwell, Hugh Earle, Bessemer, Lieut.
Cocke, Paul Leo, Birmingham, Capt.
Cooley, Boaman Shirley, Boaz, Lieut.
Cowan, Alvin Ethelbert, Ensley, Lieut.
Craddock, French Hood, Sylacauga, Lieut.
Crenshaw, Fred, Hope Hull, Lieut.
Chaudron, Percy O., Dothan, Capt.
Cryer, George Alonzo, Anniston, Lieut.
Cunningham, Modie Ezra, Birmingham, Lieut.

Dabney, Wm. Cecil, Birmingham, Lieut.
Daly, Edgar Wm., Birmingham, Lieut.
Davie, Nuckols Thornton, West Blocton, 1st Lieut.
Davis, James Haywood, Jasper, Lieut.
Day, Edward, Orville, Lieut.
Detman, Hathaway Joseph, Porter, Lieut.
Dickson, John Duane, Birmingham, Lieut.
Dixon, Duncan Patterson, Talladega, Lieut.
Dixon, Robert Emmett, Tuscaloosa, Lieut.
Dodson, Robert Bruce, Grand Bay, Lieut.
Doherty, Drayton Howard, Selma, 1st Lieut.
Downey, Isaac L., Albertville, Lieut.
Downs, Hosea Franklin, Clanton, Lieut.
Durden, John Decatur, Montgomery, Lieut.
Dykes, Hillie Robert, Ariton, Lieut.

Edwards, Bryant Benjamin, Union Springs, Lieut.
Elebash, Clarence Couch, Selma, Lieut.
Esslinger, Wade Hampton, Meridianville, Lieut.

Faris, William Elbert, Birmingham, 1st Lieut.
Faust, Daniel Basoon, Clayton, Lieut.
Fenn, Joe Wallace, Eufaula, Capt.
Fennell, Robert Foster, Gunterville, Lieut.
Ferguson, Burr, Fairfield, 1st Lieut.
Fitts, Alston, Tuscaloosa, Capt.
Fort, Maurice Almanza, Grand Bay, Lieut.

Gaillard, Samuel S., Perdue Hill, Lieut.
Gibbon, Edward Lee, Enterprise, Lieut.
Gilchrist, J. Glenn, Brantley, Lieut.
Glaze, Andrew Louis, Jr., Athens, Lieut.
Godard, Claude George, Fairhope, Lieut.
Godbold, John Cooper, Whatley, Lieut.
Goldthwaite, Robert, Montgomery, Lieut.
Goode, Jesse Albert, Albertville, Lieut.
Grace, Frank Gaines, Birmingham, 1st Lieut.
Graham, Benjamin Emmett, Gurley, Lieut.
Graves, Alexander Wilson, Ashland, Lieut.
Greet, Thomas Young, Gadsden, Lieut.
Griswold, Joel Clifford, Fitzpatrick, Lieut.

Haas, Toxey Daniel, Mobile, Lieut.
Hagler, Edward Cleveland, Northport, Lieut.
Haigler, James Robert, Montgomery, Lieut.
Hale, Robert Eugene, Bellamy, Capt.
Hall, George Washington, Uniontown, Lieut.
Hamilton, Grover Cleveland, Jacksonville, Lieut.
Hanna, Henry Pierce, Birmingham, Lieut.
Harris, Charlton Sidney, Birmingham, Lieut.
Harris, Seale, Birmingham, Major.
Harris, Thomas Nathaniel, Mobile, Lieut.
Harwood, Robert E., Gainesville, Lieut.
Hatchett, Wm. Clifton, Toney, Lieut.
Heard, Wilbur Little, Mount Vernon, Lieut.
Hendricks, Francis Gustavus, Hurtsboro, Lieut.
Hill, Clark, Canoe, Lieut.
Hodges, Rayford, Woodville, Lieut.
Hodgson, Samuel Holt, Fairhope, Capt.
Hooper, John Williams, Roanoke, Capt.
Howard, Robert Henry, Tuskegee, Lieut.
Hubbard, Thomas Brannon, Montgomery, Lieut.
Hudnall, James Roy, Maylene, 1st Lieut.
Hughes, John Frederick, Athens, Lieut.

Inge, Francis Marion, Mobile, Lieut.
Ison, Hartsford Lee, Gadsden, Lieut.

Jackson, Rufus, Birmingham, Lieut.
Jenkins, John Felix, Opelika, Lieut.
Jones, Elisha Henry, Talladega, Lieut.
Jones, John Paul, Camden, Lieut.
Jones, Thomas Warburton, Camden, Lieut.
Jordan, William Mudd, Birmingham, Capt.

Ledbetter, Llwellyn Horndon, Goodwater, Lieut.
Kenan, James, Selma, Capt.
Keyton, John Arthur, Dothan, Lieut.
Kiehnhoff, George Washington, Daphne, Lieut.

Langley, Orlando Velpeau, Loachapoka, Lieut.
Langley, W. Theo., Camp Hill, Lieut.
Lay, Harry Toulwin, Montgomery, Lieut.
Legare, Julien Keith, Forkland, Lieut.
Lett, Edmond Ruchin, Tallassee, Lieut.
Lewis, Benjamin Jefferson, Samson, Lieut.
Lewis, Thomas Knight, Birmingham, Lieut.
Little, Otie Williamson, Repton, Lieut.
Littlepage, George Frederick, Butler, Lieut.
Lowery, Rakin Robert, Atmore, Lieut.
Lull, Cabot, Jr., Birmingham, Capt.

McAdory, Edward Dudley, Cullman, Lieut
McCall, Julius Watkins, Montgomery, Lieut.
McCann, Richard Bennett, Seale, Lieut.
McConnico, Frank Hawthorn, Montgomery, Lieut.
McCorkle, Frank White, Uniontown, Lieut.
McElrath, Wm. Sparks, Cedar Bluff, Lieut.
McFadden, Albert David, Ariton, Lieut.
McKenzie, Andrew Battle (Col.), Tuscaloosa, Lieut.
McLaurine, Hugh Farrior, Fitzpatrick, Lieut.
McLean, Claude Cooper, Birmingham, Lieut.
McLendon, Mac., Fort Mitchell, Lieut.
McLester, James Somerville, Birmingham, Major.
McMillan, Daniel Walter, Birmingham, Capt.
McWhorter, Horace Lamar, Collinsville, Lieut.
McVay, Leon Victor, Salitpa, Lieut.

Maas, Monroe Aaron, Selma, Lieut.
Malone, Eugene Yuille, Samson, Capt.
Marlette, George Clark, Haynesville, Lieut.
Mason, Charles David, Scottsboro, Lieut.
Matthews, Augustus Douglas, Ariton, Lieut.
Mayhall, Clifford Vernon, Haleyville, Lieut.
Miller, James Kearney, Epes, Lieut.
Moore, Gilmer Harrison, Opelika, Lieut.
Magruder, Thomas Vannoy, Birmingham, Lieut.
Meyer, Julian Erdreich, Birmingham, Lieut.
Michlin, Irvin, Birmingham, 1st Lieut.
Moody, Maxwell, Tuscaloosa, Lieut.
Moore, Ernest Abram, Coatopa, Lieut.

Nicholsen, Lemuel Bradford, Gadsden, Lieut.
Nolan, Michael McCormick, Birmingham, Lieut.
Nye, George Earl, Hollywood, Lieut.

Oates, Wm. Henry, Mobile, Capt.
Oswalt, George Guy, York, Lieut.

Page, Woodfin Grady, Dothan, 1st Lieut.
Peavy, Julius Franklin, Jr., Robertsdale, Lieut.
Pettus, Joseph Jewett, Belle Mina, Lieut.
Phillips, Herbert Lamont, Yantley, Lieut.
Phillips, James Herman, Dora, Lieut.
Pryor, Robert Benjor, Sprott, Lieut.

Ramage, Raymond Brock, LaFayette, Lieut.
Rankin, Howard Payne, James, Lieut.
Reed, Jesse McCampbell, Chunchula, Lieut.
Rhodes, Gilbert Alfred, Troy, Lieut.
Rice, Frederick Talmage, Fort Morgan, Lieut.
Riley, Henry Clayton, Coffee Springs, Lieut.
Robbins, William Jesse, Adamsville, 1st Lieut.
Rogers, Gaston Wilder, Birmingham, 1st Lieut.
Roberts, Wyatt Sanford, LaFayette, Lieut.
Rogers, Mack, Birmingham, Capt.
Rosser, Walter Willis, Bass Station, Capt.
Rush, John Osgood, Mobile, Capt.

Sanders, John Gillis, Troy, Lieut.
Scales, John Perkins, Livingston, Lieut.
Scott, Walter Francis, Birmingham, 1st Lieut.
Shanan, John, Gadsden, Lieut.
Sherer, Moses Eason, Childersburg, Lieut.
Sherrill, John Doke, Birmingham, Lieut.
Shugerman, Harry Philip, Birmingham, Lieut.
Simpson, Harry Moody, Birmingham, Lieut.
Sims, James Anthony, Renfroe, Lieut.
Skinner, Marcus, Selma, Lieut.
Sledge, Edward Simmons, Mobile, Capt.
Smith, Alfred Clinton, Shawmut, Lieut.
Smith, Elisha Baker, Bessemer, Lieut.
Smith, James Lee, Montgomery, Lieut.
Smith, Rayford Agee, Franklin, Lieut.
Somerville, James Henry, Jr., Tuscaloosa, Lieut.
Spencer, Octavious Manilus, Birmingham, 1st Lieut.
Staggers, Wm. Llewellyn, Benton, Lieut.
Staples, Jacob Daniel, Goodwater, Lieut.
Stewart, Guy Edward, Attalla, Lieut.
Stewart, Roscoe Conkling, Ensley, Lieut.
Swann, Edward, Marion, Capt.

Tatum, Samuel Carter, Center, Lieut.
Tatum, William Briggs, Center, Lieut.
Taylor, Thomas Malter, Dozier, Lieut.
Terry, Lucius Lamar, Carbon Hill, Lieut.
Thigpen, Chas. Alston, Montgomery, Capt.
Tillery, Bert, Opelika, Lieut.
Tompkins, Lucien Montague, Fitzpatrick, Lieut.
Turlington, Lee Franklin, Birmingham, Lieut.
Vansant, James Patrick, Piedmont, Lieut.

Waites, William Leslie, Akron, Lieut.
Walker, Alfred Augustus, Birmingham, Lieut.
Ward, Daniel Webster, Tuscaloosa, Lieut.
Weatherford, Zadoc Lorenze, Red Bay, Lieut.
Webb, Alfred Pellar, Atmore, Capt.
Weldon, Joseph Marion, Tallahassee, Lieut.
Whiteside, John McIntire, Anniston, Capt.
Wiley, Clarence Cicero, Birmingham, Lieut.
Wilkerson, Frederick Wooten, Montgomery, Lieut.
Williams, Charles Winn, Choccolocco, Lieut.
Williams, James, Jacksonville, Lieut.
Wooley, Columbus Morgan, Thorsby, Lieut.
Wright, Solon Westcott, Bessemer, Lieut.

ARKANSAS

Akin, William Franklin, Branch, Lieut.
Allen, Marshall, O'Kean, Lieut.
Allen, Victor Kirkpatrick, Hope, Lieut.

Baker, Forrest Pitt, Booneville, Lieut.
Ball, William Franklin, Batesville, Lieut.
Bell, John Hasting, Arkadelphia, Capt.
Berry, Morgan Clint, Donaldson, Lieut.
Bizzell, Mathew Andrew, Texarkana, Lieut.
Boyce, Samuel George, Little Rock, Lieut.
Bridgeforth, David Oliver, Forrest City, Lieut.
Brooks, Guy Allen, Marvel, Lieut.
Bruce, Grover Cleveland, Dalark, Lieut.
Bush, John William, Hot Springs, Lieut.
Butler, Isaac Striman, Marshall, Lieut.
Butts, James William, Helena, Lieut.

Canter, William Bruce, Garland, Lieut.
Castleberry, Frank Lawrence, Paragould, Lieut.
Cathey, Arley Doyne, Wilton, Lieut.
Chapman, Arch Sylvester, Mammoth Springs, Lieut.
Cotham, Edward Ralph, Monticello, Lieut.
Cox, Aris Wellington, Helena, Lieut.

Davis, Urey G., Blytheville, Lieut.
Diemer, Frederick Erle, Hot Springs, Lieut.
Dobbins, Thomas, Humphrey, Lieut.
Doggett, Sylvester, Bredford, Lieut.
Drennen, Sherol Arnold, Rush, Lieut.

Ellis, Ira Wall, Monette, Lieut.
Eubanks, Robert Manley, Little Rock, Lieut.
Eubanks, George Washington, Wabash, Lieut.

Falisi, James Vincent, Little Rock, Lieut.
Farmer, Alfred Gibson, Hot Springs, Capt.
Felts, Wylie Robert, Judsonia, Lieut.
Fletcher, George Beard, Little Rock, Lieut.
Fly, Thos. Micajah, Little Rock, Lieut.
Fuller, Seaborn Jennings, Little Rock, Lieut.

Gahn, Dewell, Jr., Little Rock, Lieut.
Goldstein, Davis Woolf, Ft. Smith, Lieut.
Graves, Horace William, Elm Springs, Lieut.

Haney, Arthur Ceberry, Atkins, Lieut.
Harris, Alexander Everett, Little Rock, Lieut.
Harwell, Wilbur Russell, Osceola, Lieut.
Haynie, Wm. R., Haynes, Lieut.
Hays, James Fred, Russellville, Lieut.
Henry, Hugh Buren, Hulbert, Lieut.
Hibbetts, William, Texarkana, Lieut.
Hinkle, Charles Garland, Batesville, Lieut.
Houston, Mett Francis, Clarendon, Lieut.
Huffman, Kenneth Bowles, Bentonville, Lieut.

Isom, Alphonse, Dumas, Lieut.
Jarrell, Foster, Huttig, Lieut.
Jenkins, John Short, Pine Bluff, Lieut.
Johnson, Paul Edward, Holly Grove, Lieut.

Kelley, Arthur Gibbon, DeWitt, Lieut.

Kory, Robert Conklin, Little Rock, Lieut.

Lee, D. C., Little Rock, Lieut.
Lee, Henry Watkins, A., West Helena, Lieut.
Lile, Luther Mace, Jonesboro, Lieut.
Lipe, Everett Newton, Scranton, Lieut.

McCall, Wheeler, Barfield, Lieut.
McCormack, Guy Arnold, Little Rock, Lieut.
McLain, Wm. Elvis, Augusta, Lieut.
McGaha, Frank Conrad, Gregory, Lieut.

Mason, Cincinnatus Heine M., Huffman, Lieut.
Mauney, Samuel McAlister, Earl, Lieut.
Mobley, Arthur Lee, Lonoke, Lieut.
Moore, Robert Ewell, Little Rock, Lieut.
Murphy, Pat, Little Rock, Lieut.
Musser, James Fleming, Lockesburg, Lieut.

Ogden, Mahlon Dickerson, Little Rock, Lieut.

Parks, Rufus Francis, Bonanza, Lieut.
Parmley, Lee Vallette, Little Rock, Lieut.
Phillips, James Berry, Eureka Springs, Lieut.
Poe, James Fletcher, Clinton, Lieut.
Posey, Ernest Leonard, Van Buren, Lieut.
Powell, Branton Victor, Camden, Lieut.
Poyner, Erton Edwin, Green Forest, Lieut.

Ragsdale, Velpeau Hill, Fitzhugh, Lieut.
Ramsey, James Wilson, Jonesboro, Lieut.
Read, William Kimball, Texarkana, Lieut.
Rose, Wallace Dickinson, Little Rock, Lieut.
Runnels, Scott Clark, Little Rock, Capt.
Rye, Albert Webster, London, Lieut.

Scales, J. Wm., Pine Bluff, Capt.
Smith, William Mate, Hot Springs, Lieut.
Steele, Raphael William, Cave Springs, Lieut.
Strauss, Alvin Weil, Little Rock, Lieut.

Tarkington, Grayson Emery, Hot Springs, Lieut.
Thiolliere, Anthony Claudis, Varner, Capt.
Thompson, Loyd, Hot Springs, Lieut.
Towler, Harry H., Fayetteville, Capt.

Vinsonhaler, Francis, Little Rock, Capt.

Wallin, Loren, Dermott, Lieut.
Watkins, George Maxey, Walnut Ridge, Lieut.
Watson, Fred Somervell, Rosboro, Lieut.
Weaver, Robert Ellis, Hope, Lieut.
Webb, Floyd, Turrell, Lieut.
Wellborn, James Madison, West Point, Lieut.
Wells, John Bridger, Scott, Lieut.
Wilson, Thomas, Proctor, Lieut.
Winter, Woodye Albert, Wideners, Lieut.
Wolfermann, Sidney Jonas, Fort Smith, Lieut.
Wood, Geyer Chauncey, Little Rock, Lieut.

DISTRICT OF COLUMBIA

Adams, Roy Delaplaine, Washington, Major.
Anderson, Chas. L. G., Washington, Major.

Baker, Chas. L., Tacoma Park, 1st Lieut.
Barker, Howard W., Washington, 1st Lieut.
Barton, Wilfred Mason, Washington, 1st Lieut.
Bell, Charles, Washington, 1st Lieut.
Bell, Leonard P., Washington, 1st Lieut.
Bellinger, Victor E., Washington, 1st Lieut.
Bingman, Carroll Edward, Washington, 1st Lieut.
Biscoe, Frank Lee, Washington, 1st Lieut.
Bloom, Rudolph, Washington, 1st Lieut.
Bolton, Boyce R., Washington, 1st Lieut.
Borden, Daniel LeRoy, Washington, 1st Lieut.
Brady, John Chester, Washington, 1st Lieut.
Breckinbridge, Scott D., Washington, Capt.
Bryan, Jos. H., Washington, Major.
Buchanan, Wm. R., Washington, 1st Lieut.
Bunch, Henry Edgar, Washington, 1st Lieut.
Burke, John Woolfolk, Washington, 1st Lieut.

Caylor, Claude C., Washington, 1st Lieut.
Christie, Arthur C., Washington, Major.
Compton, Arthur George, Washington, 1st Lieut.
Cox, Oliver C., Washington, 1st Lieut.
Cox, Samuel C., Washington, Capt.
Curtis, Arthur Leo, Washington, 1st Lieut.

Daniels, Uriah James, Washington, 1st Lieut.
Darnall, Moses H., Washington, Capt.
Davis, George von P., Washington, 1st Lieut.
Davis, Wm. T., Washington, Major.
Dawson, John Henry, Washington, 1st Lieut.
Dean, Henry Clay, Washington, 1st Lieut.
Dunlop, John, Washington, Capt.

Duke, Lewis Charles, Washington, Capt.
English, Leonard H., Washington, 1st Lieut.
Ewing, Wm. G., Washington, Major.
Fischer, Melville B., Washington, 1st Lieut.
Foley, Thomas Madden, Washington, Capt.
Forward, Walter A., Washington, 1st Lieut.

Galloway, Thos. C., Washington, 1st Lieut.
Garrison, Fielding H., Washington, Major.
Gray, Vaughan C., Washington, 1st Lieut.
Grayson, Stewart M., Washington, 1st Lieut.
Grow, Malcolm C., Washington, Major.

Haas, Carlton D., Washington, 1st Lieut.
Hall, Custis Lee, Washington, 1st Lieut.
Hart, James W., Washington, Capt.
Hasbrouck, Edwin M., Washington, Capt.
Hayes, Henry, Washington, 1st Lieut.
Heller, Joseph M., Washington, Major.
High, Daniel L., Washington, 1st Lieut.
Hodge, Edwin R., Washington, Capt.
Hooe, Abram B., Washington, Major.
Howard, Wm. J., Jr., Washington (Col.), 1st Lieut.
Huddleston, Jarrett M., Washington, 1st Lieut.
Hume, Howard, Washington, 1st Lieut.
Huntington, Wm. Henry, Washington, 1st Lieut.
Hyde, Chas. E., Washington, 1st Lieut.
Hyde, Charles Wilbur, Washington, 1st Lieut.

Johnson, Stuart C., Washington, 1st Lieut.
Johnston, John Kent, Washington, 1st Lieut.
Jones, Edward Barton, Washington, Capt.
Jones, Thos. Edward, Washington (Col.), 1st Lieut.

Kane, Howard Francis, Washington, 1st Lieut.
Kemble, Adam, Washington, 1st Lieut.
Kerby, James Philip, Washington, 1st Lieut.
Kerr, Harry Hyland, Washington, 1st Lieut.
King, Harry Clifton, Washington, 1st Lieut.
Lehr, Louis, Washington, Capt.
Lile, Minor Carson, Washington, 1st Lieut.
Littlepage, Wm. H., Washington, 1st Lieut.
Logan, Wm. H. G., Washington, Major.
Lyon, Marcus W., Jr., Washington, 1st Lieut.

Macon, Edward Bailey, Washington, Lieut.
Madigan, John Joseph, Washington, Capt.
Manning, William John, Washington, Lieut.
Martin, Franklin Henry, Washington, Major.
Marbury, Wm. Perry, Washington, Lieut.
Marbury, Wm. Berry, Washington, Lieut.
McKay, James George, Washington, Major.
Moore, Edward Lane, Washington, Lieut.
Moore, William Cabell, Washington, Lieut.
Moran, John Francis, Washington, Capt.
Morgan, Francis P., Washington, Capt.
Morris, Roy Thomas, Washington, Lieut.
Murphy, Christopher J., Washington, Lieut.

Neuman, Lester, Washington, Lieut.
Norris, John Lawson, Washington, Capt.

O'Donnell, Wm. Francis, Washington, Lieut.
O'Leary, John Jeremiah, Washington, Lieut.

Parker, Edward Mason, Washington, Capt.
Parker, Henry P., Washington, Capt.
Passer, Wm. Frederick, Washington, Lieut.
Patten, Wm. Francis, Washington, Lieut.
Patterson, Edwin W., Washington, Lieut.
Patton, Irvin White, Washington, Capt.
Pedrick, Franklin Burche, Washington, Lieut.
Pelzman, Ivy Albert, Washington, Lieut.
Piggott, John Burr, Washington, Lieut.
Prentiss, Daniel Webster, Washington, Lieut.
Price, Harry Martin, Washington, Lieut.

Quick, Tunis Cline, Washington, Lieut.

Ralph, Charles Edward, Washington, Lieut.
Randolph, Buckner Magill, Washington, Capt.
Repetti, John Joseph, Washington, Capt.
Reiss, George Samuel, Washington, Lieut.
Rench, Victor Bell, Washington, Capt.

Reuter, Fritz August, Washington, Lieut.
Richardson, Chas. Williamson, Washington, Major.

Sampson, David Gertner, Washington, Lieut.
Schirch, George Joseph, Washington, Lieut.
Seibert, Edward Grant, Washington, Capt.
Simmons, Maynard James, Washington, Lieut.
Shields, Matthew Joseph, Washington, Capt.
Sohon, Frederick, Washington, Capt.
Southard, Wm. W., Washington, Lieut.
Suggs, James Thomas (Col.), Washington, Lieut.
Talbott, John Allan, Washington, Lieut.
Taylor, Laurence M., Washington, Capt.
Thompson, Edgar Dorman, Washington, Capt.
Thompson, Silas Stuart (Col.), Washington, Lieut.
Tilton, Joel Adams, Washington, Lieut.
Tobias, Henry Hood, Washington, Lieut.
Townshend, Grafton Dent, Washington, Lieut.

Van Rensselaer, John, Washington, Capt.
Van Sweringen, Walter, Washington, Capt.

Walker, Lewis Albert, Washington, Lieut.
Weaver, Clarence Easterly, Washington, Lieut.
Wells, Walter Augustine, Washington, Capt.
Wetmore, Wm. Olendorf, Washington, Lieut.
Whitson, Wm. Essex, Washington, Lieut.
Willson, Prentiss, Washington, Lieut.
Wilmer, Wm. Holland, Washington, Major.

Yarrow, Harry Creicy, Washington, Major.

Zinkhan, Arthur Morris, Washington, Lieut.
Zinkhan, Paul Hudson, Washington, Capt.

FLORIDA

Acker, Albert Ellsworth, Jacksonville, Lieut.
Adams, John L., Milligan, Lieut.
Ames, Allen Monti, Pensacola, Lieut.
Adams, Daniel Marvin, Panama City, Lieut.
Anderson, Warren Edward, Pensacola, Lieut.
Andrews, Chadbourne Avery, Tampa, Lieut.
Aronovitz, Samuel, Jacksonville, Lieut.
Axline, Moreton Homer, St. Petersburg, Capt.

Baker, Walter Joseph, Alton, Lieut.
Baldwin, Robert Edgar, Tampa, Lieut.
Barfield, Frederick Greene, Jacksonville, Capt.
Beardall, Harold M., Orlando, Lieut.
Bevis, Henry Powell, Arcadia, Lieut.
Birge, Edward Grant, Jacksonville, Capt.
Black, Herbert O., Jacksonville, Capt.
Blackburn, Thomas Eugene, Swainsboro, Lieut.
Blackshear, Everard, Citra, Lieut.
Bond, Andrew Robeson, Tampa, Capt.
Bouchelle, Louis Brown, New Smyrna, Lieut.
Bradshaw, John Thomas, San Antonio, Lieut.
Brigham, Percy Herbert, Branford, Lieut.
Bryans, Herbert Lee, Pensacola, Lieut.
Burks, Bennett Auxford, Titusville, Lieut.
Busey, Thomas Jesse, Pensacola, Lieut.

Callahan, Osmer Lionel, Mt. Dora, Lieut.
Cameron, Fay Asbury, Tampa, Lieut.
Cason, Turner Zeigler, Jacksonville, Lieut.
Chase, Chauncey Leonard, Eustis, Lieut.
Childs, Joseph Haskell, Clermont, Lieut.
Clinard, Shores Erastus, Jacksonville, Lieut.
Coker, Jonathan Sebastian, Gardner, Lieut.
Colley, Sanford Carl, Tavares, Lieut.
Cordes, Henry Boylston, Jacksonville, Lieut.
Counts, Herbert Walter, Ocala, Lieut.
Crigler, Wallace Payton, Tampa, Lieut.
Crum, James Wilhite, Plant City, Lieut.

Davis, Kenneth McGaskill, Hosford, Lieut.
Day, Gaston, Jacksonville, Lieut.
D'Alemberte, Clinton Willoughby, Ft. Barrancas, Capt.
Davidson, James Wilbur, Clearwater, Lieut.
Dickerson, Lucian Brown, Clearwater, Lieut.
Douglass, Wm. Campbell, Tampa, Lieut.

Efird, Lester Julien, Tampa, Lieut.
Erwin, Stanley, Jacksonville, Lieut.

Feaster, Orison Otis, Mulberry, Lieut.
Freeman, Albert Howard, Starke, Capt.

Gable, John David, Bonifay, Lieut.
Gachet, Necy Lewis, Century, Lieut.
Galey, Harry Charles, Key West, Lieut.
Gammon, Julian Eugene, Jacksonville, Lieut.
Gautier, Claude Vernon, Passagrille, Lieut.
Geiger, Hugh St. Clair, Kissimmee, Lieut.
Ginsburg, Hyman Max, Pensacola, Lieut.

Goss, Paul Lewis, Mulberry, Lieut.
Griffin, James Burnie, St. Augustine, Lieut.
Griffin, John Dorminny, Lakeland, Lieut.
Groover, Wm. Rowan, Lakeland, Lieut.
Gwynn, George Humphrey, Tallahassee, Lieut.
Gwynn, Humphrey Wilson, Tallahassee, Lieut.
Glatzau, Lewis W., Deland, Lieut.

Halliday, John, Tampa, Lieut.
Handley, Drew R., Jacksonville, Lieut.
Hanson, Henry, Jacksonville, Capt.
Hardie, Grover Cleveland, Ft. Pierce, Lieut.
Hargis, John Whiting, Pensacola, Capt.
Harris, Herrman Hirsch, Jacksonville, Capt.
Harrison, MacMiller, Palmetto, Lieut.
Heck, Maurice Eby, St. Augustine, Lieut.
Henson, Graham Edward, Jacksonville, Capt.
Hixon, Frank Petty, Pensacola, Lieut.
Hoggatt, William Wesley, Bradentown, Lieut.
Holley, John Calvert, Pace, Lieut.
Hollingsworth, Samuel Glen, Bradentown, Lieut.
Hood, Joel Walter, Ocala, Lieut.
Horne, Hendley Foxworth, Jacksonville, Lieut.
Howe, Roy, Daytona, Lieut.
Howell, Edgar B., Micanopy, Lieut.
Hubbard, Roscoe Conkling, Bushnell, Lieut.

Izlar, Arthur LaSalle, Ocala, Lieut.

Jelks, Edward, Jacksonville, Lieut.
Jenkins, Frederick Elmer, Palatka, Major.
Jennings, Charles Leitner, Jacksonville, Lieut.
Jobson, Alex M. D., Bartow, Lieut.
Johnson, George W. P. (Col.), Gainesville, Lieut.

Kendrick, Odis Gilben, Tallahassee, Lieut.
Kennedy, Stephen Russell Mallory, Pensacola, Capt.
Kilpatrick, George Carleton, Pensacola, Lieut.
Koon, Alpheus Cory, Jacksonville, Lieut.

Lambain, Ludlow, St. Petersburg, Lieut.
Lancaster, Wm. J., Tampa, Lieut.
Larner, Leonard George, Tampa, Lieut.
Leffers, Richard, Lakeland, Lieut.

Long, Eustace, Madison, Lieut.
Long, John Pomfret, Lake City, Lieut.
Lowrie, Thomas Luther (Col.), Miami, Lieut.

Maura, Frank Rutledge, Ojus, Capt.
Martin, Leon Herbert, Melbourne, Lieut.
May, Robert D., Jacksonville, Lieut.
Mills, William Austin, Miami, Capt.
Mills, Herbert Raphael, Tampa, Lieut.
Mitchell, Clifford Morgan, Welaka, Lieut.
Mitchell, Lucian Bayard, Tampa, Capt.
Mixon, Joseph Arnold, Pensacola, Lieut.
Moon, William Benjamin, Lakeland, Capt.
Moor, Frederick Clifton, Tallahassee, Capt.
McArton, Neill Duncan, Frostproof, Lieut.
McCallister, Archie, Benhaden, Lieut.
McClane, John William, St. Petersburg, Lieut.
McCartney, Johnson Nichols, Melrose, Lieut.
McClane, Frank Elmer, Ocala, Lieut.
McClellan, George Stirling, Wellborn, Lieut.
McClure, Herbert Arant, Walnut Hill, Lieut.
McDaniel, Robert Fairleigh, DeLand, Lieut.
McEachern, James Ragan, Monticello, Lieut.
McEuen, Harry Bernard, Quincy, Lieut.
McKay, William George, Jacksonville, Lieut.
McLaws, Raymond Barnett, Tampa, Lieut.
McQueen, David Herman, Punta Gorda, Lieut.
McRae, Earle Hobart, Tampa, Lieut.
MacDiarmid, John, DeLand, Capt.
MacRae, John Donald, Tampa, Lieut.

Neal, Thomas Albert, Sanford, Capt.
Newman, Heber Peacock, Bartow, Lieut.
Newnham, John Alfred, Groveland, Lieut.
Norwood, John Kirk, Jacksonville, Lieut.

Oglesby, Knowles Gittings, Bartow, Lieut.

Parramore, James Buchanan, Jacksonville, Lieut.
Parrish, Thomas Edwin, [illegible], Lieut.
Parrott, Archie Rosco, Jacksonville, Capt.
Pasco, James Denham, Jacksonville, Capt.
Pennington, James Lee, [illegible], Lieut.
Peyton, Harry Alexander, Jacksonville, Capt.
Pickett, Wm. Henry, Gainesville, Lieut.
Pierce, Lyston Hull D., Tampa, Lieut.
Plummer, George [illegible] of Key West, Major.
Ponder, James Moxie (Col.), Ocala, Lieut.
Porter, Joseph Yates, Jr., Key West, Capt.
Proctor, Harper Lane, Jacksonville, Lieut.

Randall, George Merrill, St. Petersburg, Lieut.
Richardson, Shaler Arnold, Jacksonville, Lieut.
Rivers, Dwight Gray, Lake City, Lieut.

Schultz, Frederick Wm., Sarasota, Lieut.
Sellers, Elijah Thomas, Jacksonville, Lieut.
Sherouse, George Washington, Hawthorne, Lieut.
Smith, James Archer, Punta Gorda, Lieut.
Stevens, Ralph Edwin, Sanford, Lieut.
Strickland, Edgar Eugene, Hawthorne, Lieut.
Stutts, Baldwin Shields, Port Saint Joe, Lieut.

Tillman, George Clarence, Gainesville, Lieut.

Vinson, Willie Joseph, Tarpon Springs, Lieut.

Wade, Hugh Wesley, Dade City, Lieut.
Walkup, Adam Clark, McIntosh, Lieut.
Watt, Harry Farlin, Ocala, Capt.
Watson, Archie Cowan, Live Oak, Lieut.
Whitfield, John Manon, Panama City, Lieut.
Whitlock, Wm. Eugene, Ft. White, Lieut.
Whitten, Benjamin Leland, Ft. Pierce, Lieut.
Williams, Daniel Benjamin, Lake City, Lieut.

GEORGIA

Adkins, William Nevin, Atlanta, Lieut.
Akridge, Henry Lonzoe, Sasser, Lieut.
Allen, Edwin Whitaker, Milledgeville, Lieut.
Allen, Wiles Homer, Milledgeville, Lieut.
Anderson, Jesse Monroe, Columbus, Lieut.
Archer, Linton Stephens, Augusta, Lieut.
Armour, William S., Ocilla, Lieut.
Arthur, James Franklin, Enigma, Lieut.
Atwood, George Elliot, Valana, Capt.

Baker, Hinton James, Augusta, Lieut.
Battey, Hugh Inman, Atlanta, Lieut.
Beaton, James Jules, Waycross, Lieut.
Beggs, John Miller, Pavo, Lieut.
Belcher, David Pearce, Sale City, Lieut.
Binion, Richard, Sparta, Lieut.
Bird, Buford Cosby, Colquitt, Lieut.
Bird, Frank, Valdosta, Lieut.
Blair, Leslie Lenton, Marietta, Lieut.
Bond, Benjamin Franklin, Canon, Lieut.
Bowen, Homer, Claxton, Lieut.
Boyd, John Elliott, Fort Oglethorpe, Major.
Boyd, Montague Laffitte, Atlanta, Capt.
Bradley, Birton Paul, Rome, Lieut.
Bradley, John William, Woodstock, Lieut.
Brewer, Walpole Cheek, Atlanta, Lieut.
Brookins, Claude Brantley, Gordon, Lieut.
Brooks, Henry Wills, Columbus, Lieut.
Brooks, Roland Lee, Columbus, Lieut.
Brown, Stephen Treadwell, Atlanta, Lieut.
Bryant, James Malone, Atlanta, Lieut.
Buff, Julian Holt, Elko, Lieut.
Burkhalter, John Felton, Morven, Lieut.
Burns, Gordon, Douglas, Lieut.

Call, John Calvin, Sylvania, Lieut.
Calloway, James Taylor, Atlanta, Lieut.
Campbell, Jesse Hope, Jefferson, Lieut.
Carroll, Kelso Adair, Lizella, Lieut.
Carst, Ira Clifton Hinkle, Carrollton, Lieut.
Carter, Grady Lumsden, Talbotton, Lieut.
Clifton, Ben Hill, Lyons, Lieut.
Coffet, Henry Daniel, Auburn, Lieut.
Coleman, Thomas Davies, Augusta, Major.
Colson, Algernon Columbus, Collins, Lieut.
Cooper, John Hightower, Commerce, Lieut.
Copeloff, Moses Bernard, Atlanta, Lieut.
Corbitt, Henry Thomas, Willacoochee, Lieut.
Coulter, Robert Mitchell, LaFayette, Lieut.
Council, Melton Downie, Macon, Capt.
Cowan, Zachary Stewart, Atlanta, Lieut.
Crook, Whitfield Walker, Cuthbert, Lieut.
Cross, William Franklin, Cassville, Lieut.
Crow, Horace Edmund, Gainesville, Lieut.

Daly, Leo Paul, Atlanta, Lieut.
Daly, Richard Randolph, Atlanta, Capt.
Davis, Alton Walker, Warrenton, Lieut.
Davis, Calvin Wilson, Atlanta, Lieut.
Davis, Thomas Lyles, Augusta, Lieut.
Davison, Thomas Callihan, Atlanta, Capt.
Denton, John Fletcher, Ft. McPherson, Capt.
Derr, John Sebastian, Atlanta, Lieut.
Dupree, George William, Lindale, Lieut.
Dykes, Chapman Q., Cochran, Lieut.

Edwards, Daniel Brannen, Savannah, Capt.
Ehrlich, Sige, Bainbridge, Lieut.
Ellis, William Phelps, Gay, Lieut.
Farmer, Lucius Pierce, Spread, Lieut.
Fitzgerald, Philip Hamilton, Blakely, Lieut.
Foster, Robert Ellis, Carrollton, Lieut.
Fuquay, George Lewis, Savannah, Lieut.

Giddings, Charles Glenville, Atlanta, Lieut.
Gillespie, Searle Bewley, Willacoochee, Lieut.
Graham, Rufus Elliott, Stillmore, Lieut.
Griffin, Jesse Ansley, Atlanta, Lieut.
Gunter, Roy Augustus, Jackson, Lieut.

Hall, Henry Morton, Cedartown, Capt.
Hall, John Howard, Atlanta, Lieut.
Hall, Henry Morton, Cedartown, Major.
Hamilton, Ralph Emerson, Douglasville, Lieut.
Harrington, Francis Young, Atlanta, Lieut.
Harris, Ernest Robert, Bethlehem, Lieut.
Harris, William Augustus, Savannah, Lieut.
Hendry, Jesse Homer, Morgan, Lieut.
Herrington, Wm. Gordon, Hunez, Lieut.
Herman, Ferdinand Hirsh, Eastman, Lieut.
Herndon, Oma Ernest, Powelton, Lieut.
Hill, Roy A., Pelham, Lieut.
Hinton, Chalmers, Lawrenceville, Lieut.
Hodges, Charles Augustus, Dublin, Lieut.
Holmes, John Farham, Macon, Lieut.
Hunter, William Gordon, Augusta, Lieut.

Jackson, William Andrew, Atlanta, Capt.
Jarrell, William Williamson, Thomasville, Lieut.
Johns, Lemuel Jefferson, Tallapoosa, Lieut.
Johnson, Roscoe Felix, Columbus, Lieut.
Johnston, George Lawson, Macon, Lieut.

Keeling, Lewis Jasper, Atlanta, Lieut.
Keen, Osee Fulton, Brewton, Lieut.
Kelly, George Worthington, Washington, Lieut.
Kemp, Austin James, Tifton, Lieut.
Kennon, Charles L., Rochelle, Lieut.
Key, Claud Thomas, Atlanta, Lieut.
Kirkland, Needham Lawton, Savannah, Lieut.
Kirkland, Spencer Atkinson, Zirkle, Lieut.

Lang, George Herrmann, Savannah, Lieut.
Lang, Nathaniel Hawthorne, Waverly, Lieut.
Lawrence, Charles Edward, Macon, Lieut.
Lazenby, Earl Kilpatrick, Ganak, Lieut.
Lee, Carlton Anderson, Covington, Lieut.
Lightner, Homer Grayson, Montezuma, Capt.
Lupo, Carl Wilton, Vienna, Lieut.
Lyle, Joseph Dodd, Savannah, Lieut.
Lyle, William Clifton, Augusta, Major.

MacDuffie, James Henry, Jr., Columbus, Lieut.
McAfee, Linton Cobb, Macon, Lieut.
McAllister, James Arren, Atlanta, Lieut.
McCarty, George Skinner, Sandersville, Lieut.
McClintic, James Kemp, Monroe, Lieut.
McDonald, Robert Harley, Warm Springs, Lieut.
McDougall, James Calhoun, Atlanta, Lieut.
McElroy, John Walter, Fitzgerald, Lieut.
McKellar, Harry R., Athens, Major.
McLeo, Robert Francis, Pine View, Lieut.

Malone, Henry Holcombe, Augusta, Capt.
Mansfield, Elmer E., Pelham, Lieut.
Martin, Albert Byron, Harlem, Lieut.
Massenburg, George Yellott, Macon, Lieut.
Mathews, Lee Berkeley, Hawkinsville, Lieut.
Mercer, Joseph Eugene, Baxley, Lieut.
Meredith, Albert Owen, Hartwell, Lieut.

Middleton, Charles Clayton (Col.), Savannah, Lieut
Miller, Walter Arthur, Arabi, Lieut.
Mims, Frank, Girard, Lieut.
Minchew, Benjamin Henry, Waycross, Lieut.
Mobley, Walter Eugene, Social Circle, Lieut.
Moody, Charles Mallory, Atlanta, Lieut.
Morton, Heber Jones, Waynesboro, Lieut.
Mulherin, Francis Xavier, Augusta, Lieut.
Mull, Joseph Harrison, Rome, Lieut.
Mullins, Glenn, Hiram, Lieut.
Murphey, Eugene Edmund, Augusta, Major.
Muse, Lewellyn Hudson, Atlanta, Lieut.

Nafer, Lexius H., Augusta, Lieut.
Nash, Homer Erwin, Atlanta, Lieut.
Nelson, Robert, Ft. Oglethorpe, Lieut.
Newson, Earl Thornton, Camilla, Lieut.

Oden, John Wesley, Blackshear, Lieut.
Oden, Thomas Ellsworth, Blackshear, Lieut.
Oertel, Theodore Eugene, Augusta, Major.
O'Neal, Reuben Shedley, Buena Vista, Lieut
O'Neil, Richard Thomas, Atlanta, Lieut.
Orear, William Barton, Savannah, Capt.

Page, Landrum J., Dublin, Lieut.
Perkins, Mark Edward, Millen, Lieut.
Pitman, James Fling, Decatur, Lieut.
Person, Weldon Edwards, Atlanta, Capt.
Powell, William Harry, Lumber City, Lieut.
Price, James Audison, Milledgeville, Lieut.
Pugh, Thomas Ennis, Talbotton, Lieut.

Raiford, Frank Perryn, Atlanta, Lieut.
Rayel, Albert Amis, Lexington, Lieut.
Remsen, Charles Mallory, Atlanta, Lieut.
Reynolds, Harold Irwin, Athens, Lieut.
Riner, Clinton Remus, Summit, Capt.
Roberts, James William, Jr., Atlanta, Lieut.
Robertson, Joseph Righton, Augusta, Lieut.
Rogers, Frank Willingham, Dakota, Lieut.
Rosenberg, Herbert Jerome, Atlanta, Lieut.
Roy, Dunbar, Atlanta, Lieut.
Royal, Louis Barton, Girard, Lieut.
Rubin, Harry, Fort Screven, Capt.

Sams, James Roscoe, Dearing, Lieut.
Scruggs, Claude G., Valdosta, Lieut.
Selden, John Armistead, Macon, Capt.
Sharp, Cyrus Kescusco, Arlington, Lieut.
Shaw, Henry William, Augusta, Lieut.
Shaw, Lowndes Walton, Willacoochee, Lieut.
Shepard, William Olva, Blakely, Lieut.
Sigman, John Monroe, Macon, Capt.
Silver, David Marion, Augusta, Lieut.
Smith, Chas. Sidney, Edison, Lieut.
Smith, Herschel Aticus, Americus, Lieut.
Smith, James Robert, Atlanta, Lieut.
Smith, John E., Douglas, Lieut.
Smith, Thomas Harding, Atlanta, Lieut.
Stewart, Walter Kenneth, Sylvester, Lieut.
Stockland, Cecil, Atlanta, Lieut.
Sumner, Gordon Sykes, Poulan, Lieut.
Swafford, John Herbert, Athens, Lieut.
Sykes, Nathan, Columbus, Lieut.

Taylor, Quintard, Augusta, Lieut.
Terrell, John H., Jr., Canon, Lieut.
Thompson, Alvah Roy, Buckhead, Lieut.
Thompson, Eugene Frank, Lumber City, Lieut.
Traylor, George Albert, Fort Oglethorpe, Capt.
Townsend, Egbert Merridy, Tilton, Lieut.
Tribble, Northen Orr, Atlanta, Lieut.
Turck, Raymond Custer, Ft. Oglethorpe, Major.
Turner, DeLamar, Savannah, Lieut.
Turner, George Hayne, Douglasville, Capt.

Upchurch, Wilborn Arthur, Atlanta, Lieut.
Upshaw, Charles Bell, Rydal, Lieut.
Upshaw, Harry Lee, Social Circle, Lieut.

Verner, Carol Hugh, Toccoa, Lieut.

Walker, Robert Carroll, Waycross, Lieut.
Wallace, John, Atlanta, Lieut.
Walton, Milton, Lumpkin, Lieut.
Webb, Fred Leland, Macon, Capt.
Webb, Marcus LaFayette, Omega, Lieut.
Welch, Carl B., Tifton, Lieut.
West, Andrew Lewis, Athens, Lieut.
Wise, Bowman Joel, Plains, Lieut.
White, John Anderson, Albany, Lieut.
Whitney, Walter, Augusta, Major
Whittle, Clarkston Cash, Tifton, Lieut.
Wilcox, Everard Ansley, Augusta, Lieut.
Williams, Adrian Dallas, Folkston, Lieut.
Williams, William Augustus, Monticello, Lieut
Wills, Charles Edward, Washington, Lieut.
Wood, Evans Beauchamp, Atlanta, Lieut.
Wright, Louis Tomkins (Col.), Atlanta, Lieut
Wright, Lucius Featherstone, Atlanta, Lieut.

KENTUCKY

Adams, Walter Scott (Col.), Louisville, Lieut.
Abshear, Zachry Martin, Buckhorn, Lieut
Adams, Edward, Boaz, Lieut.
Alchardson, Cleves, Louisville, Lieut.
Alexander, Henry Tablor, Fulton, Lieut.
Alexander, John Marshall, Fulton, Lieut
Allen, Joseph Hawley, Langley, Lieut.
Anderson, William Wesley, Newport, Lieut
Archer, Ernest Elmer, Auxier, Lieut.

Bach, Luther, Jackson, Lieut.
Bailey, Everett Russell (Col.), Louisville, Lieut.
Ballou, Porter Vernon, Rowena, Capt.
Barrow, David, Lexington, Major.
Bates, Edward Willard, Louisville, Lieut.
Bates, Samuel Woolford, Shepherdsville, Lieut.
Beard, Eugene Fogle, Bradfordsville, Lieut.
Beckett, Grover Athey, Sunrise, Lieut.
Bell, Robert Benjamin (Col.), Owensboro, Lieut.
Bell, Thomas Cleland, Harrodsburg, Lieut.
Belote, Garnett, Mayfield, Lieut.
Bentley, James Gordon, Manchester, Lieut.
Berry, Shaler, Newport, Lieut.
Bevins, Hiram Clinton, Thomas, Lieut.
Biggs, Harvey Louis, Jackson, Lieut.
Biggs, James David, Greenup, Lieut.
Blackburn, John Henry, Bowling Green, Major.
Blackburn, Morris Albert (Col.), Louisville, Lieut.
Blackerby, Philip Earle, Bowling Green, Capt.
Blythe, Vernon, Paducah, Capt.
Board, Milton, Louisville, Major.
Boland, Lawrence F., Stone, Lieut.
Bolin, James Achilles, Somerset, Capt.
Bond, Albert Curtis, Ashland, Lieut.
Bost, James Robert, Louisville, Lieut.
Brandon, E. C., Elizabethtown, Lieut.
Brannon, Horace Signor, Louisville, Lieut.
Bruner, William Thomas, Louisville, Lieut.
Buckner, Frank Ingram, Campbellsville, Lieut.
Buford, Charles Conrad, Bowling Green, Lieut.
Bullock, Waller Overton, Lexington, Major.

Carman, William Letwellus, Paint Lick, Lieut.
Cartwright, Frederick Deen, Bowling Green, Lieut.
Casebolt, Solomon B., Pikesville, Lieut.
Champion, Leonard, Horton's Cap, Lieut.
Chrisman, Jenn Hall, Owenton, Lieut.
Claypoole, Harlan Grover, Mt. Olivet, Lieut.
Coleman, Robert Milligan, Lexington, Capt.
Collins, Robert Lee, Hazard, Lieut.
Cook, Joseph Franklin, Louisville, Lieut.
Coolidge, Walter Legier, Louisville, Lieut.
Cornell, Dallis Lowell, Louisville, Lieut.
Cox, Walter, Lexington, Lieut.
Crawford, Clay, Fort Thomas, Lieut.
Crockett, David Porter, Hardy, Capt.
Culter, Earl Mitchell, Covington, Lieut.
Curlin, Prather Buchanan, Hickman, Lieut.
Curry, Dalferes Pennington, Jr., Bowling Green, Capt.

Davenport, Edward, Hampton, Lieut.
Davis, Van Jackson (Col.), Paducah, Lieut.
Demaree, Owen Breckinridge, Frankfort, Lieut.
DeWitt, Frank Brannon, Rockport, Lieut.
Doherty, William Brown, Louisville, Lieut.
Donan, David Cummins, Morganfield, Lieut.
Deweese, Clarence, Fordsville, Lieut.
Dravo, Emory Low, Jeffersontown, Lieut.
Duke, Henry Hunt, Louisville, Lieut.
Duncan, Richard Finley, Tompkinsville, Capt.

Eckman, William Guy, Covington, Lieut.
Edleson, Louis Hubert, Louisville, Lieut.
Eggers, Hiram Sims, Louisville, Lieut.
Ellis, Nona Bybe, Linnville, Lieut.
Ernstberger, Lee Joseph, Louisville, Lieut.

Estill, Robert [illegible]on, Lexington, Major
Evans, Raymond Myers, Tompkinsville, Lieut.

Farmer, Charles, Louisville, Capt.
Farmer, John Lee, Albany, Capt.
Feild, Nathan, Winchester, Lieut.
Ferris, Lowell, Lewisburg, Lieut.
Flaspey, Milton Lee, Mayfield, Lieut.
Foley, Floyd K., Central City, Lieut.
Ford, Edward White, Hartford, Capt.
Fort, Frank Thomas, Louisville, Capt.
Frank, Louis Wolfe, Louisville, Lieut.
Fraser, Patterson Tilford, Jr., Cadiz, Lieut.
Frayser, Wm. Neale (Col.), Louisville, Lieut.
Frutzbeam, William Joseph, Owensboro, Lieut.

Gallagher, Edward Thomas, Somerset Station A, Lieut.
Galvin, John William, Louisville, Lieut.
Garr, Charles Crain, Lexington, Lieut.
Gibson, Timothy Thomas, Middlesboro, Lieut.
Gingles, Hunter Watkins, Kirksey, Lieut.
Glenn, Robert Lee, Greenville, Capt.
Goodman, Arthur Ouchterlony, Louisville, Lieut.
Goodpaster, Joseph Scott, Owingsville, Lieut.
Gossett, Walker Bourne, Louisville, Capt.
Gower, Charles Matthew, Trenton, Capt.
Grafton, George Anderson, Fulton, Lieut.
Grant, John Daniel, Maysville, Lieut.
Grider, James Anderson, Smith's Grove, Lieut.
Griffin, Thomas Robbin, Danville, Lieut.
Griggs, Guy David, Waverly, Lieut.
Grubbs, Royla William (Col.), Paducah, Lieut.
Greenwald, Frederick, Louisville, Lieut.
Guthrie, Michael Beck, Louisville, Lieut.
Guthrie, Samuel Richard, Franklin, Lieut.

Haberer, Charles Henry, Dunmor, Lieut.
Halloran, Edward John, Bellevue, Lieut.
Hancock, Jethra, Louisville, Capt.
Hanes, Granville Scott, Louisville, Capt.
Harkey, Clifford E., Paducah, Lieut.
Harrod, Charles Penuel, South Park, Lieut.
Hartman, Eugene Campbell, Brandenburg, Lieut.
Hayden, John Luke, Salem, Lieut.
Hauser, Solmar Frederick, Covington, Lieut.
Henthorn, Arthur Carter, Garrison, Lieut.
Hill, Garland Withers, Springfield, Lieut.
Hinton, Sterling Buchanan, Adolphus, Lieut.
Hodge, Otto Phillips, Grant's Lick, Lieut.
Hoover, Isaac Jones, Owensboro, Lieut.
Hoskins, Millard Davis, Varilla, Lieut.
Hoyer, Frederick Adryan, Paducah, Lieut.
Howe, Julius Holland, Rocky Hill Station, Lieut.
Hubbard, James McConnell, Hickman, Lieut.
Hughes, Henry Anderson, Bond, Lieut.
Hunt, Charles, Clinton, Lieut.
Hyatt, Meredith Woodson, Springfield, Capt.

Irvin, Robert Andrew, Clay City, Lieut.
Irwin, Edward Lampton, Louisville, Lieut.

Jackson, Elbert William, Paducah, Lieut.
Jefferson, Wade Hampton, Cadiz, Lieut.
John, Hubert Rudolph, Louisville, Lieut.
Johnson, Otto Earle, Lebanon Junction, Lieut.
Jones, John Richard, Princeton, Lieut.

Keen, Littleton Oscar, Burkesville, Lieut.
Keefer, Smithfield, Ashland, Lieut.
Kelly, Alfred Harris, Shively, Lieut.
Kelly, Thomas Henshaw, Covington, Lieut.
Kilgore, Floyd Vern, Louisville, Lieut.
Kinnaird, Virgil Gibney, Lancaster, Lieut.
Kobert, Charles Bismarck, Lebanon, Capt.
Koontz, Frederick Luther, Louisville, Lieut.
Krieger, William Arnold, Newport, Lieut.

Lackey, Walter Adair, Paducah, Capt.
Lambeth, George Scott, Shelbyville, Lieut.
Layne, Porter Campbell, Ashland, Capt.
Lee, James Robert, Columbus, Capt.
Leslie, Walter William, Lockport, Lieut.
Lindenberger, Irvin, Louisville, Capt.
Lockhart, Robert, Owensboro, Capt.
Loeb, Virgil, Louisville, Capt.
London, Finis, Woodburn, Lieut.
Luten, Horace, Fulton, Capt.
Lutz, James Sharp, Highland Park, Lieut.

McClanahan, Charles William, Maysville, Capt.
McClymonds, Julian Turnbull, Lexington, Lieut.
McCord, Harry Elliott, Ludlow, Lieut.
McCormick, Arthur [illegible]orge Green, Major.
McCormack, William Ell, Louisville, Lieut.
McCoy, Stephen Clifford, Louisville, Capt.
McDonald, Jesse [illegible] New Castle, Lieut.
McKinley, David Howard, Winchester, Lieut.
McKinney, William Andrew, Falmouth, Lieut.
McLain, Hugh [illegible] Winona Lake, Lieut.
McLeish, George Martin, Louisville, Lieut.
McPheeters, James Walter, Columbus, Lieut.

Marks, Samuel Blackburn, Lexington, Lieut.
Mayo, Harry Hampton, Smalley, Lieut.
Meddis, Victor Newcomb, Louisville, Capt.
Meredith, Hubert Marvin, Scottsville, Capt.
Miller, Orville Ray, Louisville, Lieut.
Miller, Yandell Young, Pryorsburg, Lieut.
Montgomery, Edwin Wallace, Vine Grove, Lieut.
Moore, John Walker, Louisville, Capt.
Moore, Marshal Abner, McVeigh, Lieut.
Moore, Pattie Alonzo, Wingo, Lieut.
Moore, Paul James, Calhoun, Lieut.
Moremen, Lon Beckwith, Irvington, Lieut.
Moren, John James, Louisville, Capt.
Morris, Charles Clinton, Paducah, Lieut.
Morris, James Madison, Chesnutburg, Lieut.
Morris, John Henry, Cadiz, Lieut.
Morris, Robert Benjamin, Beach Creek, Lieut.
Mosby, Hazel Petrie, Bardwell, Lieut.
Moss, Morton McTyaire, Bowling Green, Lieut.
Moss, Robert Carlisle, Rackfield, Lieut.

Nash, William Harmon, Finchville, Lieut.
Neblet, Lamar William, Louisville, Lieut.
Needham, William Spencer, Booneville, Lieut.
Neel, William Hal, Bowling Green, Lieut.
Neidhamer, Claude Bertram, Sturgis, Lieut.
Nelson, Thomas Hayden, Covington, Lieut.
Nickell, Homer Lee, Salt Lick, Lieut.
Nortleet, Carl, Somerset, Capt.

Ogilvie, Richard Woods, Princeton, Capt.
Oliver, Richard Willis (Col.), Louisville, Lieut.
Oliver, Robert Lee, Louisville, Lieut.
Osborne, Adam Grenade, Myra, Lieut.
Overall, Asa Caperton, Lawrenceburg, Lieut.
Overall, John Brockenridge, Cox's Creek, Lieut.
Owen, Evan Ellis, Louisville, Lieut.

Page, Marion Wesley, Sedalia, Lieut.
Palmore, Eugene Ellsworth, Strode, Capt.
Parker, Sam Fletcher, Somerset, Capt.
Parrigin, Oliver Hazard Perry, Mill Springs, Lieut.
Peabody, James Boyden, Buechel, Capt.
Peebles, William Ferguson, Clinton, Lieut.
Pelle, Harry Lewis, Louisville, Lieut.
Pentz, Marvin Chester, Nicholsville, Lieut.
Perry, Abraham Murphy (Col.), Lexington, Lieut.
Phillips, Charles C., Owensboro, Lieut.
Phillips, Thomas Lowery, Kuttawa, Lieut.
Phythian, John Linton, Newport, Capt.
Pipes, Mastin Lee, Moreland, Lieut.
Pirkey, Marion Ely, Louisville, Lieut.
Pirtle, Robert Tilford, Louisville, Lieut.
Porter, Robert William, Georgetown, Lieut.
Price, Carroll Portens, Harrodsburg, Lieut.
Price, John Thomas, Harrodsburg, Capt.
Price, John William, Jr., Louisville, Capt.
Pritchett, James Henry, Louisville, Lieut.
Pryor, John Ray, Mayfield, Lieut.
Pullman, Samuel Brown, Paducah, Capt.
Purdy, George, New Liberty, Lieut.
Puryear, John G., Mayfield, Lieut.

Ranshaw, Willoughby Heath Tebbs, Covington, Lieut.
Rau, Ernest, Bowling Green, Capt.
Ray, William Edward, Staub, Lieut.
Reddish, William Dandridge, Lexington, Lieut.
Reid, George Henry, Louisville, Lieut.
Rice, Charles Rothe, Augusta, Lieut.
Richardson, John Breckinridge, Jr., Louisville, Lieut.
Richardson, Hugh Harding, Campbellsville, Lieut.
Riley, Augusta Baxter, Hartford, Lieut.
Rivers, Horace Terrell, Paducah, Capt.
Robards, John Burton, Harrodsburg, Lieut.
Robertson, Charles Arthur, Hopkinsville, Lieut.
Robertson, Dupe Senter, Cunningham, Lieut.
Robertson, George Angus, Louisville, Lieut.
Robinson, Lisle Benjamin, Madisonville, Lieut.
Rose, Lee, Silor, Lieut.
Rudell, Louis Carlisle, Louisville, Lieut.

Shackletts, John Rod, Jeffersontown, Lieut.
Sharp, Heard, Sharpsburg, Lieut.
Shaw, Clayton Whittemore, Alexandria, Capt.
Sherrill, Joseph Garland, Louisville, Capt.
Sisk, Amphlias Owen, Farlington, Capt.
Skinner, James Richard, Benton, Lieut.
Smith, Edwin Bargan, Louisville, Lieut.
Smith, Henry, Cromwell, Lieut.
Smith, Orrin LeRoy, Lexington, Capt.
Smith, Samuel Glemmons, Greenup, Lieut.
Smith, William Henry, Louisville, Lieut.
Smock, Stonewall Jackson, Glasgow, Lieut.
Solomon, Albert Loeb, Hodgenville, Lieut.
Sory, Robert, Madisonville, Lieut.
Staghton, James Martin, Covington, Lieut.
Stephenson, John Westley, Ashland, Lieut.
Stern, Milton Jacob, Paris, Lieut.
Stevenson, James McNinley, Bratton, Lieut.
Stewart, Albert, Frankfort, Lieut.
Stewart, Philip Henry, Paducah, Capt.
Stillings, Lee Chamberlain, Louisville, Capt.
Stone, Elden Wright, Bowling Green, Lieut.
Stroube, Stanley Edward, Edgerton, Lieut.
Stroup, Charles W., Ludlow, Lieut.
Stumbo, Edward, Smalley, Lieut.
Sutter, Homer Abraham, Newport, Lieut.
Swango, Overton Hobart, Jackson, Lieut.

Taylor, Hugh Frank, Mintonville, Lieut.
Taylor, Septiman Theodore, Central City, Lieut.
Thomas, Irl, Pembroke, Lieut.
Todd, Lawrence Newton, Berry, Lieut.
Tracy, Royal Bridges, Louisville, Lieut.

Van Meter, Benjamin Franklin, Lexington, Major.
Veal, Marvin Speed, Owenton, Lieut.
Venable, Charles Lee, Franklin, Lieut.
Voor, John Bernard, Louisville, Lieut.

Walker, Franklin Moran, Louisville, Lieut.
Wallace, Low G., Falmouth, Capt.
Weaver, Logan Mitchell, Allen Springs, Lieut.
Weldon, William Adair, Hardyville, Lieut.
Wheeler, John P., Carrollton, Lieut.
White, Adair Wayne, Oakland, Lieut.
White, John Wilson, Holland, Lieut.
Willard, John Henry (Col.), Louisville, Lieut.
Willingham, Edward Burnett, Paducah, Lieut.
Willmott, Clifton Brooke, Lexington, Lieut.
Wilson, Claude, Greenville, Lieut.
Wilson, John Elmer, Butler, Lieut.
Witt, Notley Conn, Franklin, Lieut.
Wood, R. Wickliffe, Cynthiana, Lieut.
Woodburn, Clarence, Central City, Lieut.
Wyatt, Walter Simrall, Lexington, Lieut.

Yeaman, Malcolm Hodge, Henderson, Capt.
Yenowine, George Hardin, Louisville, Lieut.
Yost, Edmond Reno, Greenville, Lieut.

LOUISIANA

Adams, Isaac Newton, Selma, Lieut.
Adams, James Moore, Locust Ridge, Lieut.
Alessi, Nicolo Vincenzo, Independence, Lieut.
Alford, Oliver Wendell, Segalusa, Lieut.
Atkins, Wm. Lamar, Athens, Lieut.

Bahn, Charles Adolph, New Orleans, Lieut.
Ballowe, Hewitt Leonard, Philip, Lieut.
Barkley, Claud Douglas, New Orleans, Lieut.
Belden, Webster Whitall, New Orleans, Lieut.
Bird, Thomas Buffington, New Orleans, Lieut.
Bowie, Eleazer Robinson, New Orleans, Lieut.
Bradburn, Muir, New Orleans, Lieut.
Brazier, Aaron Walter (Col.), Slidell, Lieut.
Brown, Frederick Temple, New Orleans, Capt.
Buffington, Wiley Ross, New Orleans, Lieut.
Burdett, James Crowe, Pelican, Capt.
Burgheim, Clarence Adolf, New Orleans, Lieut.

Calhoun, Delane S., Ruston, Lieut.
Callaway, William Otis, New Orleans, Lieut.
Cappel, Jack Thompson, Alexandria, Lieut.
Cappel, Marvin, Alexandria, Lieut.
Carter, Charles Sherman, New Orleans, Lieut.
Carter, Philips John, New Orleans, Lieut.
Cazayoux, Joseph Fernard, New Roads, Lieut.
Chapman, John Cecil, Colfax, La.
Charbonnet, Pierre Numa, New Orleans, Lieut.
Clark, [illegible] W. D., New Orleans, Lieut.
Coleman, [illegible] Arthur, Leleo, Lieut.
Cracroft, Thomas Byron, Kelly, Lieut.
Cronan, George Augustus, New Orleans, Lieut.
Crow, Harper Leonidas, Elm Grove, Lieut.
Crump, Thomas Eugene, Shreveport, Lieut.

D'Aunoy, Joseph Rigney, New Orleans, Lieut.
Dauterive, Henry Joseph, New Orleans, Lieut.
Davis, Benjamin David, Bunkie, Lieut.
Dicks, John Fleming, New Orleans, Lieut.
Dickson, George Bennet, Shreveport, Lieut.
Doles, Howard Patrick, Blanchard, Lieut.
Dunshie, John F., New Orleans, Lieut.
Dyer, Isadore, New Orleans, Major.

Edrington, Nicholas Kuntz, New Orleans, Lieut.
Elliott, John Barnwell, Jr., New Orleans, Major.
Evans, Ralph Prosser, Newellton, Lieut.
Evans, Theopheolus Watkins, Jackson, Lieut.

Faux, Leonidas Barkdull, Monroe, Lieut.
Fenner, Erasmus Darwin, New Orleans, Capt.
Ficklen, Edward Porter Alexander, New Orleans, Lieut.
Fleming, Patrick Henry, St. Martinville, Lieut.
Fortier, Lucien A., New Orleans, Lieut.
Furman, Francis Schrimzeour, Shreveport, Lieut.

Garrett, Brooks Cleveland, Shreveport, Lieut.
Gaulden, Charles Louis, Elizabeth, Lieut.
Genella, Louis Julian, New Orleans, Lieut.
Gerson, Gustave Raphael, New Orleans, Lieut.
Gill, Doctor Denson, Gilbert, Lieut.
Gladden, Addley Hogan, Jr., New Orleans, Lieut.
Gorton, Joseph Marion, Waterproof, Lieut.
Gremillion, Cyriaque Joseph, Alexandria, Capt.
Guthrie, James B., New Orleans, Major.

Halsey, John Taylor, New Orleans, Capt.
Hamley, William Hugh, Lake Providence, Lieut.
Heath, Arthur G., Shreveport, Lieut.
Hirsch, David Isaac, Monroe, Lieut.
Henderson, Walter Ford, Belcher, Lieut.
Huhner, Edward James, New Orleans, Lieut.
Humphreys, Ralph Wilber, New Orleans, Lieut.
Humphries, Solon Robinson, New Orleans, Lieut.
Hunt, Randall, Shreveport, Capt.

Jamison, Stanford Chaille, New Orleans, Lieut.
Jenkins, Harry, Church Point, Lieut.
Jones, Haston Varnado, Zona, Lieut.
Jones, Will O'Daniel, New Orleans, Lieut.

Kearney, Harold Leslie, New Orleans, Lieut.
Kelly, John Luther, Montrose, Lieut.
Kelly, Daniel Wade, Winnifield, Lieut.
King, Brinsfield, Clarke, Lieut.
Kirwin, Thomas Joseph, Alexandria, Lieut.

Lacroix, Paul George, New Orleans, La.
Lambeth, Walter Prescott, Allendale, Lieut.
Landry, Adrian Alcide, Plaquamine, Lieut.
Landry, Oliver Willard (Col.), New Orleans, Lieut.
Lanford, John Alexander, New Orleans, Capt.
Lea, Jessie Worthy, Jackson, Capt.
Lemann, Isaac Ivan, New Orleans, Capt.
LeSueur, George Buckner, Gonzales, Lieut.
Lett, Frank Montague, Lecompte, Capt.
Levy, Lewis Harris, New Orleans, Lieut.
Lines, Ezra Austin, New Orleans, Lieut.
Lloyd, Thomas Peterson, Shreveport, Capt.
Lopez, Louis Vyosa James, New Orleans, Lieut.
Lyons, Samuel Benson, Sulphur, Lieut.

McKowen, John, Baton Rouge, Lieut.
McNeese, William T., Angie, Lieut.
McVea, Charles, Baton Rouge, Capt.

Maes, Urban, New Orleans, Major.
Mailhes, Roger John, New Orleans, Lieut.
Major, Eric Lionel, Oscar, Lieut.
Martin, Claude Alexander, Welsh, Lieut.
Martin, John Green, Lake Charles, Capt.
Martin, Thomas William, New Orleans, Lieut.
Matas, Rudolph, New Orleans, Major.
Maxwell, Victor Wiley, Ferriday, Lieut.
May, Robert Levi, Delhi, Lieut.
Mengis, Christopher Ludwig, Norwood, Lieut.
Meraux, Louis A., St. Bernard, Lieut.
Milholland, William George, New Orleans, Lieut.

Miller, C[illegible] Jefferson, New Orleans, Capt.
Miller, [illegible] L. [illegible]
Mills, J[illegible] Cottrell, St[illegible], Lieut.
Moss, C[illegible] Hodge, H[illegible]
Murphy, C[illegible] Sutter, New O[illegible]
Murphy, Daniel Joseph, New Orleans, Lieut.

New, Ivel Winfield, New O[illegible], Lieut.

O'Ferrall, John Tolson, New Orleans, Capt.
Owen, Whyte Glendower, White Castle, Major.

Page, Joseph, H[illegible], New O[illegible], Lieut.
Palmer, Olonzo Trent, Yelgar, Lieut.
Parker, Neely W[illegible], L[illegible]
Parker, P[illegible] W[illegible], New Orleans, Major.
Parker, P[illegible], Edward Bo[illegible], Lieut.
Perdue, James Devote, New Orleans, Lieut.
Perkins, Ruffin Tronsdale, New Orleans, Lieut.
Perkins, William Martin, New Orleans, Lieut.
Pittmon, John Luthero, Winnsboro, Lieut.
Pratt, John Galbraith, New Orleans, Lieut.
Price, Richard P., Ruston, Lieut.
Prudhomme, Peter Walton, Shreveport, Lieut.
Pugh, William Whitmell, Napoleonville, Lieut.

Ragan, Thomas, Shreveport, Lieut.
Ramsey, George Allen, Farmerville, Lieut.
Rand, Paul King, Alexandria, Lieut.
Reilley, Walter Henry, New Orleans, Lieut.
Rhyne, Arthur Wellington, New Orleans, Lieut.
Robert, James John, Baton Rouge, Capt.
Rougon, Francis Frederick, Oscar, Lieut.
Rutledge, Clifford Philip, Shreveport, Lieut.

Sartor, James C., Rayville, Lieut.
Schultz, Edwin William, Alexandria, Lieut.
Scott, Warren Fielding, Alexandria, Lieut.
Sharp, Covington Hardy, New Orleans, Lieut.
Sherman, Dollio O., Columbia, Lieut.
Simon, Henry Theodore, New Orleans, Lieut.
Seemann, Wm. Henry, New Orleans, Capt.
Sherrill, Josephus Johnston, Colfax, Lieut.
Smyth, John, New Orleans, Capt.
Stilphen, Henry Newell, New Orleans, Lieut.
St. Martin, Thaddeus Ignatius, Houma, Lieut.
Strange, William Robinson, New Orleans, Lieut.

Talbot, Milton William, Bronice, Lieut.
Terhune, William Barclay, New Orleans, Lieut.
Trepagnier, Dalton Harris, Burrwood, Capt.
Troy, Thaddeus Sims, Lake Charles, Lieut.
Tucker, James Arthur, Baton Rouge, Lieut.

Upton, George Hampden, New Orleans, Lieut.

Van Wart, Roy McLean, New Orleans, Major.

Wall, Charley Kendrick, New Orleans, Lieut.
Weis, Joseph D., New Orleans, Capt.
Wheelis, Allen B., Marion, Lieut.
Whitaker, Edwin Vignes, Baton Rouge, Lieut.
Whitley, Grover Grady, Ward, Lieut.
Whittington, Alario Claudius, Bossier, Lieut.
Wilkinson, Joel Aylsus, Homer, Lieut.
Williams, Lester James, Melville, Lieut.
Willis, Daniel Oscar, Leesville, Lieut.
Windham, Robert Edward, Merryville, Lieut.

Zeagler, Allen Grover, Trout, Lieut.

MARYLAND

Akehurst, James Stewart, Baltimore, Lieut.
Alexander, John Gordon, Baltimore, Lieut.
Ashbury, Howard Elmer, Baltimore, Capt.
Atkinson, Algernon Duvall, Baltimore, Lieut.

Baer, William S., Baltimore, Capt.
Baetjer, Frederick Henry, Baltimore, Major.
Baetjer, Walter Albert, Baltimore, Capt.
Baggott, Bartus Trew, Baltimore, Lieut.
Bagley, Charles, Jr., Baltimore, Capt.
Baldwin, John Cook, Baltimore, Lieut.
Banks, Horace McMurran, Baltimore, Lieut.
Batchelor, Roger Putnam, Baltimore, Lieut.
Bayne-Jones, Stanhope, Baltimore, Capt.
Bean, Philip Jenifer, Jarboesville, Lieut.
Benson, Edward Hayes, Baltimore, Lieut.
Bernheim, Bertram Moses, Baltimore, Capt.
Binger, Carl Alfred Lanning, Baltimore, Lieut.
Bishop, George William, Govans, Lieut.
Bloodgood, Joseph Colt, Baltimore, Major.
Boggs, [illegible] Lawrence Hughes, Baltimore, Capt.
Boggs, Thomas Richmond, Baltimore, Major.
Bordley, James, Baltimore, Major.
Bortner, Milner, White Hall, Lieut.
Boyd, William Alexander, Baltimore, Lieut.
Breeding, Earle Griffith, Baltimore, Lieut.
Branin, Charles Nelson, Hagerstown, Lieut.
Brent, Hugh Walter, Baltimore, Lieut.
Bridgman, Eveleth Wilson, Baltimore, Capt.
Brooke, Charles Robert, Baltimore, Lieut.
Brumbaugh, Benjamin Bruce, Denton, Lieut.
Burket, Walter Cleveland, Baltimore, Lieut.
Burrows, Montrose Thomas, Baltimore, Lieut.
Burton, Charles Hammon, Baltimore, Lieut.

Caldwell, Robert E., Kingston, Lieut.
Carroll, Harry Roland, Baltimore, Lieut.
Carter, Henry Rose, Jr., Baltimore, Capt.
Cavanaugh, Leo Martin, Cumberland, Lieut.
Cawley, William Dennis, Elkton, Lieut.
Cecil, Howard Lee, Baltimore, Lieut.
Chaffee, Burns Stoddard, Baltimore, Lieut.
Chambers, Thomas Rodney, Baltimore, Capt.
Chatard, Joseph Albert, Baltimore, Capt.
Childs, Charles Chapin, Baltimore, Lieut.
Chisholm, Francis Miles, Baltimore, Capt.
Clift, John White Vinton, Baltimore, Lieut.
Cobb, Stanley, Baltimore, Lieut.
Cone, Sydney M., Baltimore, Capt.
Conley, Charles Henry, Frederick, Capt.
Conrad, Thomas Keanerly, Chevy Chase, Capt.
Cook, Everett LeComfte, Baltimore, Lieut.
Coonan, Thomas Joseph, Westminster, Lieut.
Crane, James Douglas, Jarboesville, Lieut.
Cudd, James Erric, Baltimore, Lieut.

Dally, Wendell Phillips, Baltimore, Lieut.
Davis, Daniel, Baltimore, Lieut.
Davis, David Melvin, Baltimore, Lieut.
Davis, John Staige, Baltimore, Capt.
Davis, Pinkey Lee, Baltimore, Lieut.
Davison, Wilburt Cornell, Baltimore, Lieut.
Dayton, Arthur Bliss, Baltimore, Lieut.
Deibel, Harry, Baltimore, Lieut.
Devereux, John Ryan, Chevy Chase, Major.
Doege, Karl Herman, Baltimore, Lieut.
Dorsey, George Hamilton, Baltimore, Lieut.
Douthirt, Cranford Haywood, Baltimore, Lieut.
Dovell, Chauncey Elmo, Green Ridge, Lieut.
Downes, John Raymond, Preston, Lieut.
DuBray, Ernest Speera, Baltimore, Lieut.
Duff, James Abram, Westport, Lieut.
Dunn, George Robert, Baltimore, Lieut.

Eidson, Joseph Pugh, Baltimore, Lieut.
Elderdice, John Martin, Salisbury, Lieut.
Ellis, Edward Dorsey, Baltimore, Lieut.
Evans, Alexander Mason, Baltimore, Lieut.
Evans, John, Baltimore, Lieut.
Evans, John Ebenezer, Baltimore, Lieut.

Fallas, Roy Edwin, Baltimore, Lieut.
Fargo, Leon Kendall, Crownsville, Lieut.
Fayerweather, Roades, Baltimore, Capt.
Feinglos, Israel Jacob, Baltimore, Lieut.
Finney, John M. T., Baltimore, Major.
Fisher, Percy Roland, Denton, Lieut.
Fisher, William Alex, Jr., Baltimore, Capt.
Frantz, Winter Reginald, Cumberland, Lieut.
Friedenwald, Edgar Bar, Baltimore, Capt.
Fuller, Robert Guy, Baltimore, Lieut.
Fulton, John Samuel, Baltimore, Capt.

Galvin, Thomas Keough, Baltimore, Lieut.
Gamble, Cary Breckinridge, Jr., Baltimore, Major.
Gantt, Harry Baldwin, Millersville, Lieut.
Gately, Joseph Edward, Baltimore, Lieut.
Geraghty, William Russell, Baltimore, Lieut.
Gillis, Alex. James, Baltimore, Lieut.
Gorter, Nathan Ryno, Baltimore, Lieut.
Gott, Ernest Fred, Baltimore, Lieut.
Groover, Gordon Lewis, Baltimore, Lieut.
Gross, Harry, Baltimore, Lieut.
Goldman, Harry, Baltimore, Lieut.
Guthrie, Clyde Greene, Baltimore, Capt.

Hahn, Albert Gaither, Baltimore, Lieut.
Hall, Roscoe Willis, Baltimore, Capt.,
Happ, William Morris, Baltimore, Lieut.
Hardy, Geo. Ed. Webb, Jr., Baltimore, Lieut.
Harmon, Charles Maxwell, Baltimore, Lieut.

Harman, Howard Engler, Baltimore, Lieut.
Harrison, Archibald Cunningham, Baltimore, Major
Hayward, Eugene Henderson, Baltimore, Lieut.
Hedrick, Erland Harold, Baltimore, Lieut.
Hereford, John R., Fort Washington, Capt.
Heuer, George Julius, Baltimore, Capt.
Hines, Frank Brown, Chestertown, Lieut.
Hoffman, Chas. Wilbur, Baltimore, Lieut.
Hoffmeier, Frank Newcomer, Hagerstown, Lieut.
Hohman, Leslie Benjamin, Baltimore, Lieut.
Holland, Joseph William, Baltimore, Lieut.
Hollingsworth, Wm. Young, Sparrows' Point, Lieut.
Holmes, Lysander Palmer, Baltimore, Lieut.
Holmes, Walter Richard, Jr., Baltimore, Lieut.
Houston, William Humes, Fishing Creek, Lieut.
Howard, Foster Cannon, Shade Side, Lieut.
Howland, John, Baltimore, Major.
Howlett, Howard Henry, Silver Spring, Lieut.
Hussey, Raymond Garrison, Baltimore, Lieut.
Hutchins, Amos Francis, Baltimore, Lieut.

Jack, William David, Baltimore, Lieut.
Jacobs, Louis Llewellyn, Baltimore, Lieut.
Jackson, Walter Jordan (Col.), Baltimore, Lieut.
Jameson, Francis Eugene, Newport, Lieut.
Janeway, Theodore Caldwell, Baltimore, Major.
Jenifer, Daniel of St. Thomas, Towson, Lieut.
Janney, John Hall, Jr., Brookville, Lieut.
Johnson, Robert Wilkinson, Baltimore, Lieut.
Johnson, Robert William, Baltimore, Lieut.
Johnson, William Robert, Baltimore, Lieut.
Johnston, Howard Hubbard, Baltimore, Lieut.
Jones, Kenneth Barzillai, Owings Mills, Lieut.
Joslin, Charles Loring, Baltimore, Lieut.

Kable, Wm. Hartman, Woodsboro, Lieut.
Kalbaugh, Alexander Brown, Westernport, Lieut.
Kahn, Moses Randolph, Baltimore, Lieut.
Kearney, Francis Xavier, Baltimore, Lieut.
Kelly, Claude Currie, Baltimore, Lieut.
Kennard, Henry W., Owings Mills, Lieut.
Ketcherside, Hilary Dunham, Baltimore, Lieut.
Ketzky, Joseph William, Baltimore, Lieut.
Kiefer, Richard Fulton, Baltimore, Lieut.
King, John Hendricken, Baltimore, Lieut.
King, John Theodore, Jr., Baltimore, Lieut.
Knapp, Hubert Clement, Baltimore, Capt.

Lamkin, Edward E., Cambridge, Capt.
Lazenby, Allen Dening, Baltimore, Lieut.
Lewis, George Edwin, Rockville, Capt.
Lichtenberg, Moses Louis, Baltimore, Lieut.
Limbaugh, Louis Mixson, Baltimore, Md.
Linthicum, Edgar Smith, Baltimore, Major.
Long, Joseph William, Walkersville, Lieut.
Looper, Edward Anderson, Baltimore, Lieut.
Lovett, Irving Kennedy, Baltimore, Lieut.
Lutz, John Francis, Baltimore, Lieut.
Lyman, John Gushman, Baltimore, Lieut.

MacCalman, Duncan, Baltimore, Capt.
McClanahan, Wm. Edw., Baltimore, Lieut.
McCleary, Standish, Baltimore, Capt.
McConachie, Alex. Douglas, Baltimore, Capt.
McHelmar, Oscar Harrison, Odenton, Lieut.
McIntosh, Wm. Page, Glenwood, Lieut.
McKenzie, Wm. Raymond, Baltimore, Lieut.
McLaughlin, Joseph Libby, Baltimore, Lieut.
McLean, George, Baltimore, Lieut.

Magruder, Charles Lowe, New Market, Lieut.
Makel, Nertel Philip, Baltimore, Lieut.
Martin, Frank, Baltimore, Major.
Martin, Walter Bramblette, Baltimore, Lieut.
Mason, Frank Ebaugh, Baltimore, Lieut.
Mason, Verne Rheems, Baltimore, Lieut.
Mayer, Erwin Emanuel, Baltimore, Lieut.
Michel, William, Frostburg, Lieut.
Millea, William Lawrence, Baltimore, Lieut.
Miller, Edward Carroll Judson, Kitzmiller, Lieut.
Moise, Theodore Sidney, Baltimore, Lieut.
Monmonier, Joseph Carroll, Catonsville, Capt.
Montgomery, Herbert B., Lanham, Capt.
Moore, Joseph Earle, Baltimore, Lieut.
Murray, Francis Alan Hordon, Mt. Savage, Capt.
Murray, John Gardner, Baltimore, Capt.

Neill, William, Baltimore, Lieut.
Neymann, Clarence Adolph, Baltimore, Lieut.
Nichols, Firmadge King, Baltimore, Capt.
Norton, John Charles, Baltimore, Lieut.

O'Connor, James Joseph, Baltimore, Lieut.
Ostendorf, Walter Anthony, Baltimore, Lieut.
Owensby, Newdigate Moreland, Baltimore, Lieut.

Peltikian, Novanness Kevork, Baltimore, Lieut.
Penrose, Clement Andariese, Baltimore, Lieut.
Peters, Don Preston, Baltimore, Lieut.
Peterson, Arthur Fredolf, Baltimore, Lieut.
Phelps, Kenneth Allen, Baltimore, Lieut.
Pincoffs, Maurice Charles, Baltimore, Lieut.
Plass, Everett Dudley, Baltimore, Lieut.
Poux, George Adrian, Baltimore, Lieut.
Powers, Francis Joseph, Baltimore, Lieut.
Preston, George Heinrichs, Baltimore, Lieut.

Rauschenbach, Chas. William, Baltimore, Capt.
Reddig, Clarence Mansfield, Baltimore, Lieut.
Reinhardt, George Herman, Baltimore, Lieut.
Ross, George Perry, Baltimore, Lieut.
Reid, Horace Withers, Baltimore, Lieut.
Reid, Mont Rogers, Baltimore, Lieut.
Reier, Adam William, Glenarm, Lieut.
Rhodes, George Kramer, Baltimore, Lieut.
Richards, Granville Hampton, Port Deposit, Lieut.
Ricker, Charles David, Baltimore, Lieut.
Rogers, Herbert Wilson, Baltimore, Lieut.
Rosenthal, Gilbert White, Baltimore, Lieut.
Rosenthal, Lewis Jay, Baltimore, Lieut.
Ruka, Emil Albert, Baltimore, Lieut.

Salan, Joseph, Baltimore, Lieut.
Sandrock, Edgar Poe, Baltimore, Lieut.
Sappington, Purnell Fletcher, Bel Air, Lieut.
Sappington, William Fulford, Hancock, Lieut.
Schapiro, Abraham, Baltimore, Lieut.
Schwartz, Grover Cleveland, Riverdale, Lieut.
Shannon, Samuel Dennison, Baltimore, Lieut.
Sharrett, George Oliver, Cumberland, Lieut.
Shelley, Albert, Baltimore, Lieut.
Shipley, Arthur Marriott, Baltimore, Capt.
Snoel, Albert Theodore, Magnolia, Lieut.
Shorkley, Thornton Moore, Kensington, Capt.
Silberman, David, Baltimore, Lieut.
Sima, Charles Edward, Baltimore, Lieut.
Simpson, Edward Percy, Rosecroft, Lieut.
Singewald, Albert George, Baltimore, Lieut.
Sisco, Henry Nathaniel, Baltimore, Lieut.
Skilling, John Galen, Baltimore, Lieut.
Slack, Henry Richmond, Jr., Baltimore, Lieut.
Smith, Daniel Glen, Baltimore, Lieut.
Smith, Henry Lee, Baltimore, Capt.
Smith, Marcus Duke, Cambridge, Lieut.
Smith, Winford Henry, Baltimore, Major.
Smith, William Henry, Baltimore, Capt.
Sorenson, Anton Christian, Baltimore, Lieut.
Spencer, Hugh Raymond, Parkton, Lieut.
Spencer, Lewis Cass, Baltimore, Lieut.
Stansbury, Henry Hodges, Baltimore, Lieut.
Steindler, Leo Fleischer, Baltimore, Lieut.
Stein, Harry Michael, Baltimore, Lieut.
Stevens, Alexander McCulley, Salisbury, Lieut.
Stewart, George Adolph, Baltimore, Major.
Stone, Harvey Brinton, Baltimore, Capt.
Stickney, George Lewis, Baltimore, Lieut.
Street, David Corbin, Baltimore, Lieut.
Stuart, Daniel D. V., Jr., Baltimore, Capt.
Stumberg, B. Kurt, St. Charles, Capt.
Sutton, Alan Callender, Baltimore, Lieut.
Sweeny, Hugh Wilson, Baltimore, Lieut.
Sydenstriker, Virgil Preston Willis, Baltimore, Lieut.

Taylor, Leslie George, Parryville, Lieut.
Taylor, Robert Tunstall, Baltimore, Major.
Thayer, Wm. Sidney, Baltimore, Major.
Thomas, Edward Philip, Baltimore, Lieut.
Tillett, William Smith, Baltimore, Lieut.
Titlow, Horace Bullock, Baltimore, Lieut.
Todd, Martillus Louis, Galloways, Capt.
Todd, Martillus Hollis, Baltimore, Lieut.
Toulson, William Houston, Baltimore, Lieut.
Traband, John Henry, Jr., Baltimore, Lieut.
Truitt, James Handy, Bowie, Lieut.
Truitt, Ralph Chess Purnell, Snow Hill, Lieut.
Tull, Edward Emory, Princess Anne, Capt.
Tyndall, Ira Clinton, Berlin, Lieut.

Utzinger, Otto Emil, Baltimore, Lieut.

Van Kirk, William, Baltimore, Lieut.

Walker, George, Baltimore, Major.
Waters, Charles Alexander, Baltimore, Lieut.

[illegible], Lieut.
[illegible], Major.
[illegible], Lieut.
[illegible], Baltimore, Lieut.
[illegible]
White, Joseph Meade, Barnesville, Lieut.
[illegible], Capt.
[illegible], Lieut.
[illegible], Aberdeen, Lieut.
[illegible], Lieut.
[illegible], Highlandtown, Lieut.
[illegible], Capt.
Wilson, George Hiram, Eckhart Mines, Lieut.
Wilson, Frank Minium, Cumberland, Lieut.
Wilson, Gordon, Baltimore, Capt.
Wilson, Harry Eugene, Baltimore, Lieut.
Wilson, James Homer, Cumberland, Lieut.
Winslow, Nathan, Baltimore, Lieut.
Wolfe, Humphrey Dorsey, Mt. Washington, Lieut.
[illegible], Capt.
Worrell, Churchill Freeman, Baltimore, Lieut.
Wynne, Herbert Maxwell Nash, Baltimore, Lieut.

Yeager, William Howard, State Sanatorium, Lieut.
Yellott, Richard Emery, Fallston, Lieut.
Young, Hugh Hampton, Baltimore, Major.

Zimmerman, Ira Melvin, Williamsport, Lieut.

MISSISSIPPI

Acker, James Milton, Jr., Aberdeen, Lieut.
Adams, John Stennis, DeKalb, Lieut.
Allen, Kotz, Summit, Lieut.
Allred, William Wallace, Kiln, Lieut.
Annis, Reginald Francis, Stillmore, Lieut.
Applewhite, Rufus Eldridge, Magnolia, Lieut.
Aycock, William Jasper, Hohenlinden, Lieut.

Backstrom, John Garner, Tutwiler, Lieut.
Ballard, James Clinton, Biloxi, Capt.
Barksdale, John Woodson, Winona, Major.
Barnett, Abner Jones, Carthage, Lieut.
Barrier, Leonidas Forister, Greenwood, Lieut.
Baskerville, George, Winona, Lieut.
Bean, Victor Hugo, Smithville, Lieut.
Bell, Canning Tom, DeKalb, Lieut.
Bell, Charles Gideon, Canton, Lieut.
Benoist, Edwin Eugene, Natchez, Lieut.
Bethea, William Roland, Hattiesburg, Capt.
Bjorneby, Peter Cornelius, Bagley, Lieut.
[illegible], Capt.
Boswell, Hugh Priddy, New Albany, Lieut.
Box, Thomas Toxey, Columbus, Lieut.
Boyd, Richard Motts, Aberdeen, Lieut.
Boykin, Solomon Relaphard, Johns, Lieut.
Brandon, John William, Money, Lieut.
Brewer, Malcolm Irvin, Jackson, Lieut.
Britt, Wallace Leslie, West Jackson, Lieut.
Brown, Harvey Lee (Col.), Laurel, Lieut.
Browne, Paul Zollicaffer, Grenada, Lieut.
Bryan, Albert Coleman, Sumrall, Lieut.
Burns, Ellis Perry, Ratliff, Lieut.
Burchfield, Burrie Earle, Ruleville, Lieut.
Bush, Thomas J., Clarksdale, Lieut.
Butler, John Culbertson, Moselle, Lieut.
Byrd, William George, Isola, Lieut.

[illegible], Capt.
Chamberlain, Charles Thompson, Natchez, Capt.
Cook, Bryan Jarred, Bovina, Lieut.
Cook, Frederick Marshall, Poplarville, Lieut.
Cooper, Inman Williams, Jr., Meridian, Lieut.
Cox, James William, Columbus, Lieut.
Cranford, William Sharpe, Meridian, Lieut.
Crawford, Walter Wesley, Hattiesburg, Major.
Crosby, Leonard Andrew, Aberdeen, Lieut.
Cuming, Harvey Thomas, Gloster, Lieut.

Davis, Cleveland, Morgan City, Lieut.
Davis, John Edgar, Columbus, Capt.
Denson, Grover Cleveland, Oakvale, Lieut.
[illegible], Lieut.
Donald, Robert Myers, Hattiesburg, Capt.
Douglas, Gilbert Franklin, Meridian, Lieut.
Draughn, Duncan McInnis, Hattiesburg, Lieut.

Ellis, Leon Cicero, Columbus, Lieut.
Elmore, Roy Charles, Durant, Lieut.
Ewing, John Sharp, Vicksburg, Capt.

[illegible], Lieut.
Fore, Oliver Rudolph, Flora, Lieut.
[illegible], Lieut.
[illegible], Lieut.

Garner, Marcellus Craig, Meridian, Lieut.
[illegible], Lieut.
Gilkey, Seth Edwin, Watson, Lieut.
Gillespie, George Yancey, Jr., Duck Hill, Lieut.
Googe, James Turner, Booneville, Lieut.
Gordon, Eugene Ray, McComb, Lieut.
Graham, Allison Tower, Eastman, Lieut.
Greene, Claude Clinton, Holly Springs, Lieut.

[illegible], Lieut.
Harrelson, Augustus Melville, Newton, Capt.
Harris, John Aaron, Webb, Capt.
Hart, Leonard, Meridian, Lieut.
Hays, Hardie Rogers, North Carrollton, Lieut.
Henry, Miller Craft, Bentonia, Lieut.
Hentz, Roger Pou, Itta Bena, Lieut.
[illegible], Lieut.
Holmes, Thomas Wilburn, Winona, Lieut.
[illegible], Capt.

Irby, Joseph Turner, Enterprise, Lieut.

James, Judge, Ackerman, Lieut.
James, William Adam DeWitt, Midnight, Lieut.
Johnson, Benjamin F., Hazlehurst, Lieut.
Johnson, Daniel Sartor, Houston, Lieut.
Johnson, John Harvey, Brookhaven, Lieut.
Johnson, Robert Lee (Col.), Jackson, Lieut.
Johnston, Hewitt, Biloxi, Lieut.
Jones, George C., Yazoo City, Lieut.

Kellis, John Howard, Shuqualak, Lieut.
Kent, Henry Cowles, Indianola, Capt.
Kittrell, John Robert, Laurel, Capt.

Lane, Swinton Lamar, Scott, Lieut.
Lanning, Jay Richard, Corinth, Lieut.
Lehmberg, Charles Edward, Columbus, Lieut.
Leigh, Robert Matthews, Meridian, Lieut.
Lenkowitz, David George, Fort Adams, Lieut.
Lester, William Cooke, Isola, Lieut.
Lilly, John Gill, Natchez, Lieut.
Lofton, Albert Columbus, Ollie, Lieut.
Lowe, Roy Chester, Fairmong, Lieut.
Lusk, William Jefferson, Brooksville, Lieut.

Mancill, George Jefferson, Indianola, Lieut.
Marshall, Benjamin Joseph, Agricultural College, Capt.
Martin, Charles Augustus, Chunky, Lieut.
McCalip, Hugh Long, Rockport, Lieut.
McDill, John Eldon, Jackson, Lieut.
McIntosh, John Suine, Mt. Olive, Capt.
McKee, Carlos Reese, Wesson, Lieut.
McKinley, Walter Russell, Columbus, Capt.
McLeod, Norman Algernon, Brookhaven, Lieut.
McNeal, Archibald Walter, Ruleville, Lieut.
McVey, Eric Alexander, Lambert, Lieut.
Melvin, John Whitworth, Camden, Lieut.
Miller, Victor H., Holly Springs, Lieut.
Moore, Dudley Rook, Cockrum, Lieut.

Neal, Little Berry, Jackson, Lieut.
Newell, Samuel Doak, Indianola, Lieut.
Nichols, Virgil Newton, Carson, Lieut.
Noel, Henry Leland, Lexington, Capt.
Norwood, Carl Western, Paden, Lieut.

Odeneal, Erskine Patrick, Biloxi, Capt.
Otken, Luther Boyce, McComb, Lieut.
Owen, James Alexander (Col.), Natchez, Lieut.

Parker, Edward Clifton, Gulfport, Lieut.
Phillips, Thomas Edward, Why Not, Lieut.
Pound, Robert Earl, Tupelo, Lieut.
Powell, Henry Bradford, Ocean Springs, Capt.
Priest, Rufus Elmer, Vardaman, Lieut.

Rainer, James Thomas, Louise, Lieut.
Reid, James Sinis, Lamkin, Lieut.
Reagan, Thomas Wright, Union, Lieut.
Richards, William Evans, Columbus, Capt.
Ricks, Fred Lee, Starkville, Lieut.
Riley, Franklin Gail, Booneville, Lieut.
Robertson, Milton Waldrop, Rienzi, Lieut.
Robinson, Benjamin Travis, New Augusta, Lieut.

Rodgers, David (Col.), Laurel, Lieut.
Rodgers, Wirt Adams, Jackson, Lieut.

Scurborough, John Franklin, Laurel, Lieut.
Seal, Zachariah James, Winona, Capt.
Scott, Walter William, Erwin, Lieut.
Senter, Curtis R., Fulton, Lieut.
Shurley, Eugene Reginald, Lula, Lieut.
Simmons, John Douglas, Gunnison, Lieut.
Slay, Iris Joe, Vaiden, Lieut.
Sparkman, Arthur Alphonzo, Cleveland, Lieut.
Speck, Clyde Madison, New Albany, Lieut.
Spencer, Shelby Cuthbirds, Shannon, Lieut.
Spivey, George Howard, Hollandale, Lieut.
Sproles, Henry Franklin, Vicksburg, Lieut.
Steen, John Houston, Vaughan, Lieut.
Stephenson, Robert Mills, Lexington, Lieut.
Stewart, Nolan, Jackson, Capt.
Strahan, William Homer, Cruger, Lieut.
Street, Augustus, Vicksburg, Lieut.
Swetson, Roy Edwin, Alexandria, Lieut.

Tackett, John Robert, Meridian, Capt.
Tucker, Irenaeus Nicholson, Meridian, Lieut.
Turner, Isaac Newton (Col.), Tupelo, Lieut.

Ullman, Jacob Sontheimer, Natchez, Capt.

Walker, Charles Emmitt, Jackson, Lieut.
Walker, Dryden Lamar, Vossburg, Lieut.
Wall, James Percy, Jackson, Lieut.
Walley, David, Richton, Lieut.
Watson, William Thomas, Banner, Lieut.
Welch, Timothy Daniel, Ellisville, Lieut.
Wells, Samuel Tilden, Alligator, Lieut.
Westmoreland, Jesse David, Taylor, Lieut.
White, James Hosmer, Prairie, Lieut.
Wicks, Armon French, Okolona, Lieut.
Williamson, Benj. Temple (Col.), Greenwood, Lieut.
Williamson, Ellison Holmes, Soso, Lieut.
Wilson, John Williams, Wanilla, Lieut.
Withers, Emile Quorles, Michigan City, Lieut.
Worthington, Thompson F., Glen Allen, Lieut.

Yates, Riley Barber, Sidon, Lieut.

Zuber, Thomas Luther (Col.), West Point, Lieut.

MISSOURI

Abbott, Frederick B., St. Louis, Lieut.
Abramopoulos, Christos A., Kansas City, Lieut.
Albright, Fred C., Bronaugh, Lieut.
Alexander, Robert D., St. Louis, Capt.
Allen, William H., Urich, Lieut.
Allison, Nathaniel, St. Louis, Capt.
Altringer, Arthur N., Kansas City, Lieut.
Appleberry, Reuben, Leadwood, Lieut.
Armstrong, John H., Kirkwood, Lieut.
Arnold, Romus, Carthage, Lieut.
Ashley, Hugh V., Bloomfield, Lieut.
Atherton, Jasper L., Springfield, Lieut.
Aull, John, Kansas City, Lieut.
Avery, Samuel D., Troy, Lieut.
Axline, Joseph T., St. Louis, Lieut.
Ayars, Treston R., St. Louis, Lieut.

Baerens, Oscar F., St. Louis, Capt.
Bailey, Frederick W., St. Louis, Major.
Bailey, William T. J., Cassville, Capt.
Balding, Ned A., Ethol, Lieut.
Balsley, Clyde M., Joplin, Lieut.
Barnes, Miles W., Kansas City, Lieut.
Bauman, Charles M., St. Louis, Lieut.
Baysinger, Stuart L., Rolla, Capt.
Beall, Homer, Malden, Lieut.
Beckemeyer, William A., Sedalia, Lieut.
Beebe, Joseph A., Kansas City, Lieut.
Beeson, John P., Southwest City, Capt.
Bell, Howard H., St. Louis, Lieut.
Bellows, George E., Kansas City, Lieut.
Belsey, Wallace A., St. Louis, Lieut.
Berry, John W., Cape Girardeau, Lieut.
Biggs, James B., Bowling Green, Lieut.
Binnie, John F., Kansas City, Major.
Birchett, John G., Cardwell, Capt.
Birsner, Louis J., St. Genevieve, Lieut.
Blair, Vilray P., St. Louis, Capt.
Blakesley, Theodore S., Kansas City, Lieut.
Blankenship, Elmer P., Houston, Lieut.
Bock, Lux Hugo, St. Louis, Lieut.
Bogard, Edward, Lilbourn, Lieut.
Boone, John C., Charleston, Capt.
Bourbon, Rollo P., St. Louis, Lieut.
Box, Ernest M., Springfield, Lieut.
Braqdon, George H., Reeds, Lieut.
Brashear, Howard C., St. Louis, Lieut.
Bremser, Harry L., St. Louis, Lieut.
Brennan, Joseph T., Vichy, Lieut.
Breuer, William H., St. James, Lieut.
Brewster, Roger B., Kansas City, Capt.
Brookes, Henry S., St. Louis, Lieut.
Brookes, Theodore P., St. Louis, Lieut.
Brown, Arthur C. F., Kansas City, Lieut.
Brown, Charles H., Fair Play, Lieut.
Browne, Lewis E. J., Kansas City, Lieut.
Bryan, Richard S., St. Louis, Capt.
Burdick, Charles H., St. Louis, Lieut.
Burns, Robert, Jr., St. Genevieve, Capt.
Burns, Stanley S., St. Louis, Lieut.
Byrns, Robert E., St. Louis, Lieut.

Calhoun, James G., St. Louis, Capt.
Cameron, Solon, St. Louis, Capt.
Campbell, Oliver H., St. Louis, Capt.
Campbell, Roscoe C., Forest Green, Lieut.
Cardwell, Clarence, Stella, Lieut.
Carley, Harry D., St. Louis, Lieut.
Carthrae, Lewis, Jr., Cordor, Lieut.
Cavaness, Ernest W., Kansas City, Lieut.
Cave, Robert R., Kansas City, Lieut.
Chaffin, William L., Breckenridge, Lieut.
Chattle, William M. K., St. Louis, Lieut.
Clark, Edward H., Kansas City, Capt.
Clark, Ira Ross, St. Louis, Capt.
Clayton, Paul B., Odessa, Lieut.
Clendening, Logan, Kansas City, Capt.
Clint, Morgan L., Meadville, Lieut.
Clopton, Malvern B., St. Louis, Lieut.
Coats, Charles C., Winston, Lieut.
Cochran, John H., St. Louis, Lieut.
Coffey, Grundy C., Platte City, Lieut.
Coffin, Ernest L., St. Louis, Lieut.
Cohen, Felix, Kansas City, Lieut.
Colley, Elijah A., St. Joseph, Lieut.
Connell, Evan S., Kansas City, Lieut.
Cook, Scott, Qulin, Lieut.
Cook, Emmett F., St. Joseph, Lieut.
Cook, Ralph L., St. Louis, Lieut.
Cooper, Calvin L., Kansas City; Capt.
Cooper, George F., Kansas City, Lieut.
Cooper, James F., Hannibal, Capt.
Corn, John A., Amoret, Lieut.
Crank, Alexander C., Canton, Lieut.
Crossen, Harry S., St. Louis, Capt.
Culbertson, Wm. F., Kansas City, Lieut.
Cummings, Edson S., Lewiston, Lieut.
Culpepper, Wm. S., Willow Springs, Lieut.
Cutler, Robert R., Berger, Lieut.

Dagg, George R., North Kansas City, Lieut.
Dallwig, Leon E., St. Louis, Lieut.
Davis, Charles F., Kansas City, Lieut.
Delzell, Wm. A., Springfield, Lieut.
De Vereaux, John J., Hawk Point, Lieut.
Dewey, James E., Springfield, Lieut.
Deweese, Everett R., Butler, Lieut.
Dibble, Joseph E., Kansas City, Lieut.
Dickson, Frank D., Kansas City, Capt.
Dieckman, William C., Dexter, Lieut.
Divine, Duke G., Appleton City, Lieut.
Dixon, Elliott K., St. Louis, Lieut.
Donahue, James C., St. Louis, Lieut.
Douglas, John H., Dexter, Lieut.
Dripps, Roy C., St. Louis, Lieut.
Dugan, Harry W., Kansas City, Lieut.

Eads, Leander J., Hamilton, Lieut.
Earnest, Clarence E., Kansas City, Lieut.
Eberbach, Carl W., St. Louis, Lieut.
Edens, Louis M., Cabool, Lieut.
Edmonds, Devilla D., Kansas City, Lieut.
Egbert, Thomas H., Kennett, Lieut.
Elders, Frank A., Bloomsdale, Lieut.
Elliott, James R., Kansas City, Lieut.
Elliott, John Robert, Clarksdale, Lieut.
Ellis, Ralph Victor, Norwood, Lieut.
Ernst, Edwin Charles, St. Louis, Lieut.
Eyermann, Charles Hermann, St. Louis, Capt.

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[illegible]
[illegible]
[illegible]
[illegible]
Francisco, Clarence Benjamin, Kansas City, Capt.
[illegible]
Frazier, Claude Eugene, Kansas City, Lieut.
Frazier, Francis Virgil, Altamont, Lieut.
Freeman, Will Loren, St. Charles, Lieut.
Frick, William Jacob, Kansas City, Major.
Fry, Walton Floyd, St. Louis, Capt.
Fuerth, Arthur Laurence, Cape Girardeau, Lieut.
Fulton, William Ira, Mt. Vernon, Capt.
Funkhouser, Robert Monroe, St. Louis, Capt.
Funsch, Edwin Clarence, St. Louis, Lieut.
Fuson, Levi Harrison, St. Louis, Lieut.

Garner, Kirby Curtis, Crosstown, Lieut.
Gasser, Fred, Pierce City, Lieut.
Gausepohl, Lawrence Edward, St. Elizabeth, Lieut.
Gay, Ray Jackson, New Hartford, Lieut.
Getelson, Joseph, Kansas City, Lieut.
Gibbs, Fred LeGrande, St. Louis, Lieut.
[illegible]
Gilliland, Oliver Sheley, Kansas City, Lieut.
Glynn, Robert Raymond, Springfield, Lieut.
Goodrich, Harold Arrott, Webster Groves, Lieut.
Goodson, Fenton Noah, St. Joseph, Lieut.
Gordon, Frank Newton, St. Louis, Lieut.
Gossow, August Anton, St. Charles, Capt.
Grace, Thomas Andrew, Excelsior Springs, Lieut.
Graff, John Jarvey, Lithium, Lieut.
Green, Philip Palmer, St. Louis, Lieut.
Griffith, Edgar McDonnell, Creighton, Lieut.
Griot, Albert Jacob, St. Louis, Lieut.
Griot, George August, St. Louis, Lieut.

Haley, Roy Robert, Brookfield, Lieut.
Hall, Eugene, St. Joseph, Lieut.
Hall, John Randolph, Napton, Lieut.
Hall, Stanley Mountjoy, Clarence, Lieut.
Hamel, Albert Henry, St. Louis, Capt.
Hamilton, Clarence Orval, St. Louis, Lieut.
Hansen, Walter Joseph, St. Joseph, Lieut.
Hanna, Minford Armour, Kansas City, Capt.
Hardesty, Joel Wise, Hannibal, Lieut.
Hardesty, John Frank, St. Louis, Lieut.
Harrison, Alfred Wesley, Warrensburg, Lieut.
Harrington, Walter Webster, Kansas City, Lieut.
Hartigan, Francis Xarier, St. Joseph, Lieut.
Havard, Hardy David, Sedalia, Lieut.
Hawley, Nelson Joy, St. Louis, Lieut.
Haworth, Dillon Benjamin, Kansas City, Lieut.
Hayden, John Gardner, Kansas City, Capt.
Haynes, Salon Earl, St. Louis, Lieut.
Hecker, Charles Henry, St. Louis, Lieut.
Hecker, Friedrich Alexander, Kansas City, Lieut.
Heddens, Vernon Offutt, St. Joseph, Lieut.
Hedgepeth, George Washington, Kansas City, Lieut.
Hedges, Frank, Pattonsburg, Lieut.
Hedrick, Harold Bertrum, Kansas City, Lieut.
Heibner, Eugene Albert, Green Ridge, Lieut.
Heithaus, Aloys Severin, St. Louis, Lieut.
Heiple, Edward Eli, St. Louis, Lieut.
Heller, Edward Peter, Kansas City, Lieut.
Henderson, James Paris, Kansas City, Capt.
Hereford, Robert, St. Louis, Lieut.
Herrick, Harold Colton, St. Louis, Major.
Herriot, Charles Edward, St. Louis, Lieut.
Hess, John D., Clarkton, Capt.
Heuer, Scott, St. Louis, Capt.
Heuman, George Washington, St. Louis, Lieut.
Hibbard, Sherman Blaine, Kansas City, Lieut.
Hill, Halbert Rowland, Bachelor, Lieut.
Hill, William Hickman, Kansas City, Lieut.
Hiller, Frank Baker, Kansas City, Lieut.
Hoagland, William Louis, Kansas City, Lieut.
Hobbs, Arthur Alvah, Kansas City, Lieut.
Hobson, Abraham Dana, St. Louis, Lieut.
Hodge, Russell Lowe, Kansas City, Lieut.
Hoefer, Edward August, Marceline, Lieut.
Hoel, William Mathias, Lockwood, Lieut.
Hopkins, Charles Babson, Kansas City, Lieut.
Hoxie, George Howard, Kansas City, Capt.
Hudson, Carl Bibb, Montgomery City, Lieut.
Hume, John Robert, Doniphan, Lieut.

[illegible]
[illegible]
Hynes, Joseph Charles, St. Louis, Lieut.

Insley, Herbert Wellington, Rich Hill, Lieut.

[illegible]
Jenkins, Charles Edwin, Brookfield, Lieut.
Johnson, Grover Clayton, Belle, Lieut.
Johnson, John William, Hayti, Lieut.
[illegible]
[illegible]
[illegible]
Johnston, Meredith Rutherford, St. Louis, Capt.
[illegible]

Kelley, Isaac Dee, Jr., St. Louis, Capt.
Kennedy, Andrew Frederick, St. Louis, Capt.
Kenney, William LeRoy, St. Joseph, Lieut.
Keeley, Granvil Lessen, Kansas City, Lieut.
Kock, Otto Wilhelm, Ballwin, Lieut.
Konzelman, John Albert, St. Louis, Lieut.
Kouri, Martin Fiad, St. Louis, Lieut.
Krall, Paul Morton, Kansas City, Lieut.
Kuhlmann, Frederick Carl Emil, St. Louis, Capt.
Kuhn, Harold Philip, Kansas City, Capt.

Landy, Joseph A., Oxford, Lieut.
Langsdorf, Herbert Sidney, St. Louis, Lieut.
Larimore, Joseph William, St. Louis, Lieut.
LaRue, Frank, Dexter, Lieut.
LaRue, Harper Mills, Kansas City, Lieut.
Laws, Clarence Jackson, Princeton, Lieut.
Lee, Elbert Johnson, Jr., St. Louis, Capt.
Long, Frank Barnes, Sedalia, Lieut.

Heggat, Abraham Chittendon, St. Louis, Capt.
Lehman, Edwin Partridge, St. Louis, Lieut.
Leighton, William Elston, St. Louis, Capt.
Leonard, Arthur Charles, Kansas City, Lieut.
Leonard, Ward Holmes, Kansas City, Lieut.
Leslie, James Frederick, Barnett, Lieut.
Levin, Sidney Saul, St. Louis, Lieut.
Lewald, James, St. Louis, Lieut.
Link, Edward Zavier, St. Louis, Lieut.
Logan, James Alexander, Warsaw, Lieut.
Long, Charles Richard, Sedalia, Lieut.
Long, Frank Barnes, Deladia, Lieut.
Long, Levi Samuel, St. Joseph, Lieut.
Long, Lewis H., Denver, Lieut.
Love, Jos. Wooding, Springfield, Capt.
Lowe, Frederick McKendrie, Kansas City, Lieut.
Lowe, Horace Arch, Springfield, Lieut.
Ludwig, Frederick, St. Joseph, Capt.
Lusk, Charles Amne, Butler, Lieut.
Luedde, William Henry, St. Louis, Capt.
Lutman, Harry Nelson, Versailles, Lieut.
Lyman, Harry Webster, St. Louis, Lieut.
Lynch, John Charles, Kansas City, Lieut.

McBride, William Linn, Kansas City, Capt.
McCall, Otis M. Sheridan, Rocky Comfort, Lieut.
McCarthy, Eugene Florian, St. Louis, Lieut.
McCarthy, Harvey Edward, Kansas City, Lieut.
McCulloch, Hugh, St. Louis, Capt.
McGinnis, Clive Sidney, Sedalia, Capt.
McGonigle, Gerald Louis, Kansas City, Lieut.
McHenry, Ray Ralph, St. Louis, Lieut.
McKittrick, Ora Francis, St. Louis, Lieut.
McMahon, Bernard John, St. Louis, Lieut.
McPherson, Owen Perry, Kansas City, Lieut.

Mackey, Dudley Earl, Clayton, Lieut.
Maeys, Alvin Henry, St. Louis, Lieut.
Maness, Charles Edward, Stella, Lieut.
Maples, Floyd Herman, Clever, Lieut.
Mark, Ernest Guthrie, Kansas City, Capt.
Martin, John Ross, Merwin, Lieut.
Martyn, John Herbert, Cuba, Lieut.
Max, Clarence Oscar Christian, St. Louis, Lieut.
Meade, Reginald Heber, Kansas City, Capt.
Mellies, Walter Julius, St. Louis, Lieut.
Menefee, Buell Fountain, Montgomery City, Lieut.
Mercer, Ray, Canton, Lieut.
Mestemacher, Louis Henry, St. Louis, Lieut.
Meyers, Montague Milton, St. Louis, Lieut.
Middlebrook, Robert, Kansas City, Capt.
Miehe, William John, St. Louis, Lieut.
Milne, Lindsay Stephen, Kansas City, Capt.
Miller, George Caplice, Kansas City, Lieut.

Mills, Roy Fallas, Odessa, Lieut.
Mook, William Hewson, St. Louis, Capt.
Moore, Harry Morgan, St. Louis, Capt.
Moore, Isaac Edward (Col.), Jefferson City, Lieut.
Moore, Charles, Advance, Lieut.
Montgomery, Charles Franklin, St. Louis, Lieut.
Morse, John Campbell, St. Louis, Major.
Morton, Harry Thomas, Richmond, Lieut.
Morris, Clyde Leon, South Greenfield, Lieut.
Mueller, Olive Paul, Kansas City, Lieut.
Mullinax, Clay Eli, Princeton, Lieut.
Munson, Carlos Lucius, St. Louis, Lieut.
Murphy, Fred Towsley, St. Louis, Major.
Murray, Samuel Astley, Holden, Lieut.
Murrell, Ralph Ellis, Kirkwood, Lieut.
Myers, Roy Everett, Newtonia, Lieut.

Nelson, William Lawrence, St. Louis, Lieut.
Nickell, Luther Ove, Macon, Capt.
Nieweg, George Alfred, Vancleve, Lieut.
Nigh, John Wesley, Pattonsburg, Lieut.

O'Donnell, Henry St. Clair, St. Louis, Lieut.
Ogilvie, Roy Kimbrough, East Prairie, Capt.
Olmsted, William Harwood, St. Louis, Lieut.
Opie, Eugene Lindsay, St. Louis, Capt.
Oradoff, Hersey Elroy, St. Louis, Lieut.
Ousley, James Whitman, Kansas City, Lieut.
Owen, Robert Emmet, St. Louis, Lieut.
Owens, Roy Jefferson, Millspring, Lieut.
Owens, Michael Joseph, Kansas City, Lieut.

Palmer, William Rolland, Kansas City, Lieut.
Parker, Ray Howard, Moscow Mills, Lieut.
Parrish, Isaac Newton, Palo, Lieut.
Patton, William George, Farmington, Lieut.
Payne, Richard Johnson, St. Louis, Lieut.
Peden, Joseph Carroll, St. Louis, Lieut.
Penn, George Edward, McKittrick, Lieut.
Perkins, Oscar Legier, Union Star, Lieut.
Perrings, Fred Selby, St. Louis, Lieut.
Perry, John Morris, Princeton, Lieut.
Philebaum, John Charlton, St. Joseph, Lieut.
Petty, Wallace Sidney, Rutledge, Lieut.
Pickrell, Claude Dildine, St. Louis, Lieut.
Platter, Abram Edson, Memphis, Lieut.
Poe, Chester Arthur, Fruitland, Lieut.
Post, Lawrence Tyler, St. Louis, Capt.
Post, Martin Haywood, St. Louis, Lieut.
Postlethwaite, Frank McCluny, Kansas City, Lieut.
Potts, James Madison, Springfield, Lieut.
Powers, James William, Kansas City, Lieut.
Powers, Charles Ellerethe, Rockville, Lieut.
Powers, John Alexander, Warrensburg, Lieut.
Pratt, Fabian Lee, Linneus, Lieut.
Proetz, Arthur Walter, St. Louis, Lieut.

Ragan, Stephen Hood, Kansas City, Lieut.
Ragan, Stephen T., Moberly, Lieut.
Ramming, Herman, St. Louis, Lieut.
Randall, Leslie C., Licking, Lieut.
Raithel, Gerhardt Herman, St. Louis, Capt.
Ravenel, Mazyck Porcher, Columbia, Major.
Ravold, Amand M., Jefferson Barracks, Capt.
Rice, James Wesley, Kansas City, Lieut.
Rienhoff, Wm. Frederick Andrew G., Springfield, Lieut.
Redington, James Crescent, St. Louis, Lieut.
Riley, George Lesley, St. Louis, Lieut.
Rives, Thomas La Force, St. Louis, Lieut.
Robinson, Guy Frank, Koch, Lieut.
Rogers, Fordyce Barker, Kansas City, Lieut.
Rothman, Joseph, St. Louis, Lieut.
Russell, Richard Lee, Humansville, Lieut.
Ryan, Lawrence Augustus, St. Louis, Lieut.
Ryan, Linus Martin, St. Louis, Lieut.

Sattersby, Richard Stanley, Shelbine, Lieut.
Say, William Joseph, St. Louis, Capt.
Schaffer, Joseph Charles, St. Louis, Lieut.
Scherman, Louis William, St. Louis, Lieut.
Schmalhorst, David E., St. Louis, Lieut.
Schmitz, Edgar Ferdinand, St. Louis, Lieut.
Schwab, Sidney Isaac, St. Louis, Capt.
Schwald, Norman Anthony, Cole Camp, Lieut.
Schorer, Edwin Henry, Kansas City, Capt.
Scrutchfield, Guthrie Eugene, Marshall, Capt.
Seelig, Major Gabriel, St. Louis, Major.
Sewing, Arthur Henry, St. Louis, Capt.
Shaw, Frederick William, Mt. Vernon, Capt.
Shepherd, Horace Albert, Moscow Hills, Lieut.
Sheetz, Robert, Orrick, Lieut.

Shreffler, Algie Ray, St. Louis, Lieut.
Singleton, Dennis Edward, Clarence, Lieut.
Sippy, Alvin Hiram, St. Louis, Capt.
Skinner, Edward Holman, Kansas City, Capt.
Small, Walter [illegible], Kansas City, Lieut.
Smith, Charles [illegible], Osceola, Capt.
Smith, Delbert O., Kansas City, Lieut.
Smith, Edward Sanborn, Macon, Capt.
Smith, James Herbert, Kansas City, Capt.
Smith, Marshall Ashby, Gallatin, Lieut.
Smith, William Alexander, Webster Groves, Lieut.
Smith, William L., St. Louis, Lieut.
Snyder, Samuel Harrison, Kansas City, Lieut.
Spake, La Verne B., Kansas City, Lieut.
Spence, Elbert LaFayette, Fulton, Lieut.
Spencer, Frederick Bascom, Hannibal, Lieut.
Spivy, Raymond Mills, St. Louis, Capt.
Steinmann, Wm. August Henry, St. Louis, Lieut.
Stewart, Joseph Edgar, St. Louis, Lieut.
Stofer, E. R. Stanton, Kansas City, Lieut.
Strachan, Henry Morris, St. Louis, Lieut.
Stearns, Charles H., Clinton, Lieut.
Strauss, Arthur Edgar, St. Louis, Lieut.
Strawn, Estil Young (Col.), St. Joseph, Lieut.
Stone, Frank Lee, St. Louis, Lieut.
Stone, Murray Chaffee, Springfield, Lieut.
Stuart, Francis Ignatius, Independence, Lieut.
Swanson, John Theodore, Kansas City, Lieut.
Sweany, Raymond Bart Thomas, St. Louis, Lieut.

Tainter, Frank Joseph, St. Charles, Capt.
Tate, Lloyd Lewis, St. Louis, Lieut.
Taylor, Herbert Isaac, St. Louis, Lieut.
Teachenor, Frank Randall, Kansas City, Lieut.
Thomas, Walter Stevens, St. Louis, Capt.
Thompson, Jamie Campbell, St. Louis, Lieut.
Tilton, Welcome Blaine, Grant City, Lieut.
Tinges, Frank, Kansas City, Lieut.
Toney, Lee Egbert, Piedmont, Lieut.
Tooney, Thomas Noxon, St. Louis, Lieut.
Topping, Moses Hawkins, Flat River, Lieut.
Tucker, Arthur Ottis, Maysville, Lieut.
Tull, Guy Austin, Kansas City, Lieut.

Ude, Waldemar, St. Louis, Capt.
Unterberg, Hillel, Glendale, Capt.
Urbabowski, Leon Vincent, St. Louis, Lieut.

Valentine, Herbert Spencer, Kansas City, Lieut.
Veeder, Borden Smith, St. Louis, Capt.
Vessells, Francis Meredity, Perryville, Capt.
Vinyard, Robert, St. Louis, Lieut.
Vosburgh, Charles Augustus, St. Louis, Capt.

Wainwright, Allen Gans, St. Louis, Lieut.
Wallace, Hilen Ketcham, St. Joseph, Lieut.
Wallen, Luther Hayes, Summerville, Lieut.
Warfield, Sylvanus Holsey (Col.), Louisiana, Lieut.
Watkins, George Lancaster, Farmington, Lieut.
Wells, George Millard, Springfield, Lieut.
West, Walter Ernest, Trenton, Lieut.
Westerman, Clarence Mansur, St. Louis, Lieut.
Weston, Ursa Cleveland, Osgood, Lieut.
White, William Garland, Lewistown, Lieut.
Whittaker, John Henry, Kansas City, Lieut.
Wilhelmi, Otto Julius, St. Louis, Lieut.
Wilnite, George Otto, Centertown, Lieut.
Wilkin, Thomas John, Seline, Lieut.
Williams, James Recter, Kansas City, Lieut.
Williams, John Wilson, Nashville, Lieut.
Williams, Paul Raymond, Cape Girardeau, Lieut.
Williams, Reuben Hamilton, St. Clair, Lieut.
Williams, Robert Sidney, St. Clair, Lieut.
Wills, William Judy, Springfield, Lieut.
Wilson, Charles Edgar, Kansas City, Major.
Wilson, Frank Norman, St. Louis, Lieut.
Wilson, John, Bloomfield, Lieut.
Wilson, Ray Edward, LaBelle, Lieut.
Winemiller, Lee Hanville, Farley, Lieut.
Wittwer, Edward Christian, Mountain Grove, Lieut.
Wood, James Ballance, St. Louis, Lieut.
Woodruff, Frederick Eno, St. Louis, Capt.
Woolley, Paul Vincent, Kansas City, Lieut.
Woolsey, Calvin Lee, Chillicothe, Lieut.
Wyatt, Douglas, Mineola, Lieut.
Wyer, Henry Gage, Kirkwood, Capt.

Yeagle, Rowland Paxton, Pleasant Hill, Lieut.
York, William Bransford, St. Louis, Lieut.

Young, Henry McClure, St. L[illegible] Lieut.
Y[illegible] Lieut.

Zimlick, Arthur John, St. Louis, Lieut.

NORTH CAROLINA

Abel, Joshua Fanning, Waynesville, Lieut.
Abernathy, Eric A., Chapel Hill, Lieut.
[illegible] Lieut.
[illegible]
Allan, William, Charlotte, Capt.
Allen, Benjamin Gill, Henderson, Lieut.
[illegible]
Alexander, Samuel Allen, Creswell, Lieut.
Anderson, Jasper Neill, Albermarle, Lieut.
Andrews, Nathan H., Rowland, Lieut.
Armstrong, Charles Wallace, Troy, Lieut.
Arnold, Laurie James, Lillington, Lieut.
Ashby, Edward Clayton, Greensboro, Lieut.
Austin, DeWitt Ray, Charlotte, Lieut.

Baggett, Leaman, Tabor, Lieut.
Banner, Charles Whitlock, Greensboro, Lieut.
Barefoot, Julius Jackson, Graham, Lieut.
Beall, Louis Girardan, Asheville, Lieut.
[illegible]
Beckwith, Robert Payne, Rosemary, Lieut.
Bell, Carl Wendell, Raleigh, Lieut.
Benbow, John Thomas, East Bend, Lieut.
Bennett, Percival Robert, Bryson City, Lieut.
Benthall, Rack Foy, Ahoskie, Lieut.
Boober, Wm. John Henry (Col.), Oxford, Lieut.
Boyles, Joseph Henry, Greensboro, Lieut.
Brackett, William Ernest, Caroleen, Lieut.
Brenizer, Addison Gorgas, Jr., Charlotte, Major.
Brooks, Baird Urquhart, Durham, Lieut
Brown, Presley Robinson, Swepsonville, Lieut.
Bryant, William Henry (Col.), Henderson, Lieut.
Bryson, Edmond Jones, Fontana, Lieut.
Buie, Roderick Mark, Williamstown, Lieut.
Bullard, John Bunyan, Steadman, Lieut.
Burnett, Foster Flavorial (Col.), Wilmington, Lieut.
Burrus, John T., High Point, Major.

Caldwell, Joseph Henderson, Charlotte, Lieut.
Candler, Charles Zachariah, Sylva, Lieut.
Cannady, Nicholas Boddie, Laurinburg, Lieut.
Carstarphen, Wm. Turner, Wake Forest, Capt.
Chaney, Thomas Morris, Winston-Salem, Lieut.
Chester, Pinkney Jones, Mooresville, Lieut.
Choate, Glenn William, Rockwell, Lieut.
Clarke, DeWitt Duncan, Clarkton, Lieut.
Clinton, Roland Smith, Rocky Mount, Lieut.
Colby, Charles DeWitt, Asheville, Capt.
Cole, Walter Francis, Greensboro, Lieut.
Coleman, George Stephenson, Kenly, Lieut.
Covington, James Madison, Jr., Wadesboro, Lieut.
Craig, Sylvester Douglas, Winston-Salem, Capt.
Crews, Numa Haden, Henderson, Lieut.
Crowell, William Herbert, Whiteville, Capt.
Cutchin, Joseph Henry, Whitakers, Lieut.

Davis, James Matheson, Wadesboro, Lieut.
Dees, Ralph Erastus, Greensboro, Lieut.
Dimmette, James Arthur, Gastonia, Lieut.
Dixon, George Grady, Ayden, Lieut.
Durham, Albert, Charlotte, Lieut.
Dye, John Calvin, Statesville, Lieut.

Ellen, Cicero Jasper, Greenville, Lieut.

Farrar, Mont Royal, Kings Mountain, Lieut.
Fetner, Lawrence Merrill, Charlotte, Lieut.
Fletcher, Marshall Hall, Asheville, Major.
Floyd, L. Dowe, Cerro Gordo, Lieut.
Freeman, Malthus Reaumer, Bailey, Lieut.

Garrenton, Cecil, Bethel, Lieut.
Gentry, Charles Woffard, Greenville, Lieut.
Gold, Thomas Byron, Lawndale, Lieut.
Green, William Wills, Tarboro, Lieut.
Greene, James Cannon, Greenville, Lieut.
Grier, Charles Talmage, Carthage, Lieut.

Hall, Jack Homer, Woodsdale, Lieut.
Harbeck, Edward Vincent, Weaverville, Lieut.
Hardin, Eugene Ramsey, Clinton, Lieut.
Hathcock, Thomas Alexander, Norwood, Lieut.
Hayes, Robinette Burns, Hillsboro, Lieut.
Hays, Benjamin Kinsey, Oxford, Capt.
Haywood, Thomas Woodly (Col.), Raleigh, Lieut.
Henderson, Thomas Brantley, Henderson, Lieut.
Hensley, Charles Albert, Burnsville, Lieut.
[illegible] Capt.
Hill, Julius Nepolson, Murphy, Lieut.
Holmes, Andrew Byron, Councils, Lieut.
Hooks, Thel, Smithfield, Lieut.
Hooper, Joseph Ward, Wilmington, Lieut.
[illegible]
Houser, Marcus Calvin, Charlotte, Lieut.
Hovis, Leighton Watson, Charlotte, Lieut.
Hunter, William Myers, Charlotte, Capt.

Jones, Beverly Nicholas, Walnut Cove, Lieut.

King, Edward Steptoa, Statesville, Lieut.

Laughinghouse, Charles O'Hanlor, Greenville, Major.
Lawrence, Charles Solomon, Winston-Salem, Capt.
Ledford, Henry Pender, Stocksville, Lieut.
Leggett, Virgil Wilson, Hobgood, Lieut.
LeGwin, John Bunyan, Wilmington, Lieut.
Leinbach, Robert Frederick, Charlotte, Capt.
Lockett, Everett Augustin, Winston-Salem, Capt.
Long, Glenn, Newton, Lieut.
Long, John Wesley, Greensboro, Major.
Lyle, Samuel Harley, Franklin, Lieut.

McAnally, William Jesse, High Point, Lieut.
McCall, Alvin Clay, Rocky Mount, Lieut.
MacConnell, John Wilson, Davidson, Capt.
McCorkle, Matthew Locke, Newton, Lieut.
McIntosh, Leland Carson, Henderson, Lieut.
McIver, Evander McNair, Jonesboro, Lieut.
McKay, Hamilton Witherspoon, Charlotte, Lieut.
McLean, Charles Erwin, King's Mountain, Lieut.
McLelland, William David, Mooresville, Lieut.
McMullen, Thomas Shelton, Hertford, Lieut.

Magruder, Levin Freeland, Albemarle, Lieut.
Mann, Thomas Allen, Fairfield, Lieut.
Martin, Louis Goodman, Murphy, Lieut.
Matheson, James Pleasant, Charlotte, Capt.
Maxwell, Henry Byrne, Whiteville, Lieut.
Mayerberg, Israel Wallace, Selma, Lieut.
Miller, John Floyd, Asheboro, Lieut.
Mitchell, George William, Macclesfield, Lieut.
Moore, Burmah Dixon, Mt. Holly, Lieut.
Moore, Hugh Tate, Wilmington, Lieut.
Moore, John Laughorn, Wendell, Lieut.
Moore, Robert Alexander, Charlotte, Lieut.
Mordecai, Alfred, Raleigh, Lieut.
Morgan, Allie Dexter, Scotland Neck, Lieut.
Morris, George Blythe, Mount Olive, Lieut.
Moseley, Herbert Pennell, Farmville, Lieut.

Noble, Robert Primrose, Raleigh, Lieut.
Northeet, Edgar Powell, Rexobel, Lieut.

Orr, William Law, Matthews, Lieut.

Pace, Karl Busbee, Greenville, Lieut.
Patchin, Daniel Frank, Roanoke Rapids, Lieut.
Pate, Frederick James, Greensboro, Lieut.
Patrick, George Riddle, Lowell, Lieut.
Perry, Vance Price, Kinston, Lieut.
Pendleton, Arthur Sylbert, Raleigh, Lieut.
Person, Hector McLean, Goldsboro, Lieut.
Petree, Paul Augustus, Germantown, Lieut.
Powers, John Brewer, Wake Forest, Lieut.
Pressly, John Mason, Belmont, Lieut.

Ray, Hickman, Raleigh, Lieut.
Reade, Edwin Godwin, Durham, Lieut.
Robinson, Harvey, Reidsville, Lieut.
Robinson, John Daniel, Wallace, Lieut.
Roebuck, Charles Thomas, Williamston, Lieut.
Ross, John Kirkland, Charlotte, Lieut.
Rozzelle, Jacob Henry, Salisbury, Lieut.
Royster, Thomas Haynes, Tarboro, Lieut.
Ruark, William Thomas, Wilmington, Lieut.

Saliba, Michael, Wilson, Lieut.
Salmons, LeRoy, Winston-Salem, Lieut.
Sadler, Rupert Colvert, Whiteville, Lieut.
Scott, Egbert Theophilus, Wilmington, Lieut.
Scruggs, William Henry, Asheville, Lieut.
Scruggs, William Marvin, Rutherfordton, Lieut.
Shaw, Colin, Burgaw, Lieut.
Shepard, Charles Haddon, Durham, Lieut.
Sherrick, Coite Long, Statesville, Lieut.
Shugart, Floyd Caldwell, Elkin, Lieut.
Shull, Joseph Rush, Cliffside, Lieut.
Siske, James Eltin Augustus, Troy, Lieut.
Sloan, William Henry, Garland, Lieut.

Smoot, Marvin LeRoy, Fayetteville, Lieut.
Squires, James Williamson, Charlotte, Capt.
Stevens, Ralph Sanders, Raleigh, Lieut.
Stockard, James K., Reidsville, Capt.
Stringfield, Oliver Linwood, Jr., Mars Hill, Lieut.
Suiter, Wester Ghio, Weldon, Lieut.
Summet, Thomas Johnson, Brevard, Lieut.
Swindell, Charles LeRoy, Wilson, Lieut.
Swindell, Frederick Overton, Belhaven, Lieut.

Templeton, James McPherson, Cary, Lieut.
Thames, John, Winston-Salem, Lieut.
Thaxton, Benjamin Adams, Greensboro, Lieut.
Thomas, William Nelson, Oxford, Lieut.
Thompson, Alexander Frank, Troy, Lieut.
Thompson, Hugh Alexander, Raleigh, Lieut.
Thompson, James Solomon (Col.), Dunn, Lieut.
Thompson, Sanford Webb, Neuse, Lieut.
Townsend, Maurice Lyndon, N. Wilkesboro, Lieut.
Troy, Thaddeus Sims, Greensboro, Lieut.
Turlington, Henry Cleveland, Cooper, Lieut.
Turner, Henry Gray, Raleigh, Lieut.

Uhlo, Russell Todd, Franklinton, Lieut.

Van Poole, Carl Marcellus, Salisbury, Lieut.
Van Poole, Chalmers Melancthon, Salisbury, Capt.
Vass, Rufus Samuel (Col.), Burlington, Lieut.
Vernon, James William, Morgantown, Lieut.
Von Glahn, William Carson, Wilmington, Lieut.

Way, Joseph Howell, Waynesville, Capt.
Watts, Randolph Edwin, Kannapolis, Lieut.
Webb, Louis Harvard, Chapel Hill, Lieut.
West, Louis Nelson, Raleigh, Lieut.
Whitaker, Richard Sidgood, Whiteville, Lieut.
Whitehead, Luther Jackson, Scotland Neck, Lieut.
Wilkerson, Thaddeus Earl, Raleigh, Lieut.
Williams, William Christopher, Apex, Lieut.
Willis, Harry Clay, Merry Hill, Lieut.
Wilmerding, William Edward, Salem, Lieut.
Wilson, Clarence LaFayette, Lenoir, Lieut.
Wilson, Newton Graves, Summerfield, Lieut.
Winstead, John Armstead, Nashville, Lieut.
Wishart, William Emmett, Charlotte, Lieut.
Woodard, Charles Augustus, Durham, Lieut.
Woodard, Grover Barney, Kenly, Lieut.
Wrenn, Frank R., Siler City, Lieut.
Wyatt, Wortham, Winston-Salem, Lieut.

OKLAHOMA

Akers, George Arthur, Ada, Lieut.
Alexander, Charles Watts, Temple, Lieut.
Antle, Harry Clifford, Chickasha, Lieut.
Athey, John Varmore, Bartlesville, Lieut.

Bacon, Charles Walter, Yale, Lieut.
Bailey, Frank Marion, Oklahoma, Lieut.
Bailey, Howson Clark, Sulphur, Lieut.
Baird, William G., Oak Hill, Lieut.
Baker, John Howard, Indianola, Lieut.
Baker, Robert Lee, Wynnewood, Lieut.
Barber, George Stanley, Lawton, Lieut.
Barry, William Richard, Bradley, Lieut.
Bevill, Sims Duvall, Poteau, Lieut.
Bisbee, Walter Griswold, Chandler, Lieut.
Bitting, Benjamin T., Enid, Lieut.
Blachley, Charles Dallas, Drumright, Lieut.
Blesh, Abraham Lincoln, Oklahoma City, Lieut.
Bolend, Rex G., Oklahoma City, Lieut.
Boyd, Thomas Madison, Norman, Lieut.
Bradley, Calvin Edward, Mountain View, Lieut.
Briggs, Harry Arthur, Henryetta, Lieut.
Brodie, William W., Tulsa, Lieut.
Brown, Paul Richard, Tulsa, Lieut.
Brown, Benjamin Henton, Muskogee, Capt.
Browne, Henry Silas, Tulsa, Lieut.
Bryan, Cecil, Vian, Lieut.
Buchanan, Frank Reitz, Canton, Lieut.
Bunker, Lyman Lundon, Enid, Lieut.

Calhoun, Robert Elice, Hallett, Lieut.
Campbell, Eugie Alva, Heavener, Lieut.
Campbell, Nevel Walter, Poteau, Lieut.
Campbell, Samuel Thomas, Anadarko, Lieut.
Carson, Frank Leroy, Shawnee, Lieut.
Cheek, James Anthony, Sallisaw, Lieut.
Chumley, Chonner Polk, Oklahoma City, Lieut.
Clark, Isaac Frederic, Avant, Lieut.
Clement, William Richard, Tulsa, Capt.
Clulow, George Henry, Tulsa, Lieut.
Coker, George Bonnes, Cyril, Lieut.
Comer, Montie Cristo, Clinton, Lieut.
Cossey, William A. L., Prague, Lieut.
Culbertson, Roland R., Maud, Lieut.

Davenport, Albert Ewing, Oklahoma City, Lieut.
Day, John Lewis, Norman, Lieut.

Earnest, Albert, Muskogee, Lieut.
Evans, Samuel Ray, Stillwell, Lieut.
Edens, Milton Henry, Anadarko, Lieut.
Edward, Joseph T., Oklahoma City, Capt.
Evans, Logan Ilk, Drumright, Lieut.

Fain, Burton, Frederick, Lieut.
Fannin, Frank Arthur, Stigler, Lieut.
Fox, Raymond H., Altus, Lieut.
First, Francis Ray, Cashion, Lieut.
Francisco, Frank Glenn, Kremlin, Lieut.

Gardner, Charles Campbell, Ashland, Lieut.
Gardner, Pendleton, Haileyville, Lieut.
Gearhart, Alonzo Pit, Blackwell, Lieut.
Garlington, Elmer Franklin, Tar River, Lieut.
Garrett, Davy Lewis, Altus, Lieut.
Gregory, David Albertus, Ardmore, Lieut.
Gunter, Joseph Thomas, Ochelata, Lieut.
Guthrie, Austin Lee, Oklahoma City, Lieut.

Haggard, John Baker, Foraker, Lieut.
Hancock, Joseph Mitchell, Kendrick, Lieut.
Harrington, William Emery, Wakita, Capt.
Harris, James Grady, Muskogee, Lieut.
Hawkins, James Clinton, Blackwell, Lieut.
Heatley, John Evans, Carmen, Lieut.
Heitzman, Charles William, Muskogee, Capt.
Henry, James Worrall, Oklahoma City, Lieut.
Herod, Philip Frickelton, El Reno, Lieut.
Hollis, Jesse Benjamin, Hallis, Lieut.
Holt, Rufus Leroy, Mangum, Lieut.
Houser, Charles Edward, Vici, Lieut.
Howard, Robert Hayburn, Oklahoma City, Capt.
Humphreys, Daniel Wilson, Owasso, Lieut.
Hunter, George, Oklahoma City, Lieut.
Husbund, William G., Louis, Lieut.

Jackson, Will Wilson, Vinita, Lieut.
Janney, Jas. Garfield, Lawton, Lieut.
Jansing, Joseph Henry, Tryon, Lieut.
Jones, Benjamin George, Oklahoma City, Lieut.
Jones, Ester Lee, Ingersoll, Lieut.

Karasek, Matthew, Drumright, Lieut.
Kerr, George E., Chattanooga, Lieut.
Kilpatrick, Garnett Astley, Wilburton, Lieut.
Koppenbrink, Walter Edwin, Bartlesville, Lieut.
Kurtz, Russell Lenoir, Nowata, Capt.
Kurykendall, Louis Clifton, McAlester, Lieut.

Landrum, Sam Houston, Altus, Lieut.
Lawson, Esley Elwood, Oakwood, Lieut.
Lee, Clarence Edward, Oklahoma, Lieut.
Lee, Daniel Schenk, Guymon, Lieut.
Lewis, James L., Lawton, Lieut.
Little, Daniel Erastus, Eufaula, Lieut.
Lloyd, Henry Clay, Hobart, Lieut.
Long, Ross D., Oklahoma City, Lieut.

McBride, Earl Dawain, Ralston, Lieut.
McCreery, Robert Charles, Erick, Lieut.
McFarland, Harman Brewer, Cleveland, Lieut.
McGregor, Frank Harrison, Mangum, Lieut.
McLean, George Davidson, Oklahoma City, Capt.
McNaughton, Guy Perry, Miami, Lieut.
McQuown, Harry, Stillwater, Lieut.
McVey, George Madison, Verden, Lieut.
Maiers, Henry Whitfield, Hugo, Lieut.
Mallory, James Henry, Shawnee, Lieut.
Marker, Glenn Luther, Elk City, Lieut.
Marks, Walker Roscoe, Vinita, Lieut.
Marshall, Jessie Gwynn, Canton, Capt.
Martin, Alfred Edwin, Marietta, Lieut.
Milne, Louis Archie, Lawton, Lieut.
Ming, Charles Morris, Okmulgee, Lieut.
Mitchell, Woodward Roberts, Verden, Lieut.
Montgomery, Alexander Boyd, Checotah, Lieut.
Moore, Dan Miller (Col.), El Reno, Lieut.
Motley, Robert William, Tulsa, Lieut.
Muller, Julius August, Snyder, Lieut.
Murphy, Charles Percy, Red Rock, Lieut.
Myers, Francis Charles, Broken Arrow, Lieut.

[illegible], Lieut.
[illegible], Lieut.
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[illegible], Lieut.
[illegible], Lieut.
[illegible], Lieut.
Nyland, George Andrew, Gate, Lieut.

[illegible], Lieut.
Ozias, Chas. Ralph, Aylesworth, Lieut.

[illegible], Lieut.
Parramore, James Ennis, Antlers, Lieut.
[illegible], Lieut.
Patterson, James Lindley, Mutual, Lieut.
Pendleton, John Winston, Kingfisher, Lieut.
Peterson, Charles Arthur, Tahlequah, Lieut.
Puckett, Carl, Pryor, Lieut.
Putnam, Claude Eugene, Pocassett, Lieut.

[illegible], Capt.
Renfrow, Thomas Franklin, Billings, Lieut.
Reid, John Lehr, Blackwell, Lieut.
Rice, Edgar Elmer, Shawnee, Lieut.
Richmond, Henry Charles Tyler, Marshall, Lieut.
Riley, John Lee, Henryetta, Lieut.
Riley, Robert Sales, Hartshorn, Lieut.
Rogers, Isaac Walter, Kellyville, Lieut.
Roland, Marion Mansfield, Oklahoma City, Lieut.
Rose, Charles Clarence, Stringtown, Lieut.
Rowland, Tazwell David, Shawnee, Lieut.
Rucks, William Ward, Guthrie, Lieut.
Rushing, Ennis Ewing, Coalgate, Lieut.
Rutledge, James Allen, Woodville, Lieut.

Sanger, Fenton Mercer, Oklahoma City, Lieut.
Shankle, Henry DeWitt, Hastings, Lieut.
Sapper, Herbert Victor Louis, Oklahoma City, Lieut.
Shauney, John Norris, Eufaula, Lieut.
Shepard, Robert Melvin, Talihina, Lieut.
Shrout, Cecil Benj., Shawnee, Lieut.
Siberts, Paul Raymond, Cooperton, Lieut.
Simon, Wm. Ebert, Alva, Lieut.
Sims, Charles Crawson, Healdton, Lieut.
Sims, Harry James, Stigler, Lieut.
Sims, Wm. Penn, Drumright, Lieut.
Smith, R. Barlo, Gracemont, Lieut.
Smith, Ralph Vernon, Tulsa, Lieut.
Smitherman, Jackson (Col.), Tulsa, Lieut.
Sorgatz, Frank Bruner, Oklahoma City, Lieut.
Starr, Orange Walter, Drumright, Lieut.
Stecher, Herman Edwin, Supply, Lieut.
Stone, Samuel Newton, Edmond, Lieut.
Stout, Marvin Elroy, Oklahoma City, Lieut.

Tedrowe, Chas. Worman, Woodward, Lieut.
Thomas, John Gordon, Alluwe, Lieut.
Thompson, Jos. Martin, Tahlequah, Lieut.
Tilly, George Washington, Pryor, Lieut.
Toler, Thos. Maxwell, Wirt, Lieut.
Tucker, Wm. Medwin, Sulphur, Lieut.

Vandever, Harl Fitzgerald, Lahoma, Lieut.
Van Sandt, Guy Barton, Wewoka, Lieut.

Waggoner, Ethan Baley, Tonkawa, Lieut.
Wagner, Howard Alonzo, Shawnee, Lieut.
Walker, John Asa, Shawnee, Lieut.
Warterfield, Floyd Edward, Muskogee, Lieut.
Watkins, Barton Hiram, Gotebo, Lieut.
Weaver, Edward Sherman, Dill, Lieut.
Webb, Roy Abner, Oklahoma City, Lieut.
Welborn, Orange Elbert, Kingston, Lieut.
Wellman, Clarence L., Okmulgee, Lieut.
West, Willis Kelly, Oklahoma City, Lieut.
Wheeler, James William, Gracemont, Lieut.
Whitaker, Wm. Jerry, Pryor, Lieut.
Wilhite, Lee Roy, Helena, Lieut.
Williams, Reuben Worrell, Anadarko, Lieut.
Willour, Leonard Scott, McAlester, Capt.
Wilson, Samuel Warren, Lindsey, Lieut.
Wright, Thomas Henry (Col.), Guthrie, Lieut.

Yazel, Herman Eugene, Bartlesville, Lieut.
Yeakel, Erl Leroy, Oklahoma City, Lieut.

SOUTH CAROLINA

Able, Erle Lafayette, Lamar, Lieut.
Ackerman, William Boswell, Watterboro, Lieut.
Alexander, Oscar Albertus, Darlington, Lieut.

[illegible], Lieut.
[illegible], Lieut.
[illegible], Lieut.
Barnwell, John DuBose, Florence, Lieut.
[illegible], Lieut.
Bearden, John Madison, Laurens, Lieut.
Blakeley, Damar Howley, Greenville, Lieut.
Bickley, William Ernest, Newberry, Lieut.
Bolin, Grover Cleveland, Neeses, Lieut.
[illegible], Lieut.
Boykin, Gary Long, Lamar, Lieut.
[illegible], Lieut.
[illegible], Lieut.
Bryson, James Lauderdale, Winnsboro, Lieut.
Burdell, William John, Lugoff, Lieut.
[illegible], Lieut.

Carroll, Francis Julian, Summerville, Lieut.
Claussen, John Rudolph, Claussen, Lieut.
Clinkscales, Grady Sebastian, Starr, Lieut.
Corbett, Lacy Wood, Bishopville, Lieut.
Coggeshall, Julian Terrell, Darlington, Lieut.
Colson, John Davis, St. Stephen, Lieut.
Coward, Francis Asbury, Columbia, Lieut.
Craig, Lawrence Rosboro, Dillon, Capt.
Crawford, Robert Hope, Rock Hill, Lieut.

Daniels, James Ernest, Greenville, Capt.
Davis, Raymond Neel, Troy, Lieut.
Durham, Robert Blakeley, Columbia, Lieut.

Eaddy, Julius David, Greenville, Lieut.
Edwards, Joseph Benjamin, Batesburg, Lieut.

Felder, William Wesley (Col.), Sumter, Lieut.
Fishburne, Charles Carroll, Scotis, Lieut.

Gardner, Robert L., Chesterfield, Lieut.
Geiger, Charles Blum, Manning, Lieut.
Goodwin, Charles Isham, Meggett, Lieut.
Graham, William Frederic, Summerville, Capt.
Griffith, Lewis Muller, Columbia, Lieut.
Grimball, Isaac Hobart, Ridgeland, Lieut.

Hamilton, Reuben Gilliam, Rockton, Lieut.
Harle, Curran Bertram, Greenville, Capt.
Harris, Herbert Harlan, Anderson, Lieut.
Harvin, Frank Madison, Pinewood, Lieut.
Howell, Carroll Sumner, Marion, Lieut.
Hunter, Philip Williams, York, Lieut.

Jacobs, Clarence David, Kingstree, Lieut.
Jeter, James Thomas, Santuck, Lieut.
Johnston, Preston Joseph, Estill, Lieut.

Kirkpatrick, Lawrence Randolph, Bennettsville, Lieut.
Klugh, George Fred, Cross Hill, Lieut.
Knight, James Pelham, Hosea Path, Lieut.

Lester, William Evans, Lake View, Lieut.
Little, Adolphus Lamar, Blacksburg, Lieut.
Love, Samuel Glenn, Chester, Lieut.
Lynch, William Solomon, Scranton, Lieut.

Marrett, William Clinton, Newry, Lieut.
Major, Everett Carlisle, Latta, Lieut.
Mattison, James Acker, Hot Springs, Major.
McFadden, Ralph Hope, Chester, Lieut.
McGowan, Robert Paul, Cross Hill, Lieut.
McMurray, William Stewart, Lockhart, Lieut.
Miller, Thomas Ezekiel, Jr. (Col.), Anderson, Lieut.
Montgomery, Benton McQueen, Orangeburg, Lieut.
Moore, Thomas Mellichampe, Hagood, Lieut.
Morgan, Arthur Daniel, North, Lieut.
Mower, Frank Duane, Newberry, Lieut.

Nettles, Oscar Winborne, Jordan, Lieut.
Neves, Carl Albert, Greenville, Lieut.
Norton, James Arthur, Conway, Lieut.

Orr, James Lawrence, Greenville, Lieut.

Parker, Francis Lejau, Charleston, Major.
Parker, John Williams, Greenville, Lieut.
Patterson, Edward Lawrence, Barnwell, Lieut.
Peake, Theodore James, Clinton, Lieut.
Peeples, Johnston, Estill, Lieut.
Peters, Lindsay, Columbia, Lieut.
Powe, Walker Haliburton, Greenville, Lieut.
Pratt, John Halloway, Ninety-Six, Lieut.
Pruitt, George Calhoun, Calhoun Falls, Lieut.
Pruitt, Harrison Almus, Anderson, Lieut.
Pruitt, Samuel Orr, Anderson, Lieut.

Ray, Cecil Browning, Olar, Lieut.
Rhett, Robert Barnwell, Charleston, Lieut.
Richie, Emory Wallace, Abbeville, Lieut.
Roberts, Victor Marion, Blacksburg, Lieut.
Rodgers, Floyd Dwight, Columbia, Lieut.
Ross, Clyde Fenton, Anderson, Lieut.
Ross, H. Madison, Chester, Lieut.

Salley, Fitzhugh Prothero, Buffalo, Lieut.
Sanders, Frank Butler, Chesterfield, Lieut.
Sanders, Lucius Carl, Anderson, Lieut.
Setzler, John Bachman, Newberry, Lieut.
Sharpton, Ben Tillman, Clark's Hill, Lieut.
Simmons, John Francis, Greenwood, Lieut.
Sloan, Baylis Frank, Walhalla, Lieut.
Smith, Clark Wales, Liberty, Lieut.
Smith, Frank Congar, Yankton, Lieut.
Smith, William Alexander, Fort Moultrie, Capt.
Stevens, Charner LeRoy, Campbelle, Lieut.
Stone, Theodore Craft, Aiken, Capt.
Symmes, Thomas Henry, St. Matthews, Lieut.
Thomas, Hillard Bernard, Chester, Lieut.
Truluck, George Madison, Marion, Lieut.

Walker, Theron Otis, Greenville, Lieut.
Wallace, James Marvin, Greenville, Lieut.
Wallace, John, Easley, Capt.
Ward, John LaBruce, Columbia, Lieut.
Webb, Jeff Newton, Townville, Lieut.
Weekley, Augustine Smythe, Barnberg, Lieut.
Wilson, Roske Jerome (Col.), Florence, Lieut.
Wilson, Thos. Robt. Waters, Greenville, Lieut.
Woods, Thomas Butler, Whitmire, Lieut.
Wyman, Benj. Franklin, Aiken, Lieut.
Wyman, Marion Hay, Columbia, Capt.

TENNESSEE

Acuff, Harley Leland, Knoxville, Lieut.
Acuff, Herbert, Knoxville, Lieut.
Alexander, Willis Socrates, Ridgely, Lieut.
Anderson, Ernest Lynne, Memphis, Lieut.
Anderson, Guy Collins, Eads, Lieut.
Anderson, Henry Osgood, Williamsport, Lieut.
Anderson, Piatt Halstead, Memphis, Lieut.
Arnold, Benjamin Clayton, Jackson, Lieut.
Arrants, William Ross, Athens, Lieut.
Auston, David Tarwater, Bogota, Lieut.

Bacota, Rufus H. (Col.), Nashville, Lieut.
Baldwin, Wm. Hupp, Memphis, Capt.
Ballard, William Herman, Bolivar, Lieut.
Banks, Claude Melnotte, Springfield, Lieut.
Barbee, John Taylor, Jackson, Capt.
Barnett, Jackson Herman, Chattanooga, Capt.
Barr, Richard Alexander, Nashville, Major.
Bartlett, Glenn, Kingsville, Lieut.
Baugh, Wendell Phillips, Elkton, Lieut.
Beck, Clyde McKay, Memphis, Lieut.
Bell, Clarence Angele, Memphis, Lieut.
Bell, Walter A., Cloverdale, Lieut.
Bender, Charles Alexander, Memphis, Lieut.
Biddle, Percy D., Columbia, Lieut.
Billington, Roy Wallace, Nashville, Lieut.
Blassingame, Charles Decatur, Memphis, Lieut.
Boals, John Orr, Somerville, Lieut.
Bolton, Leslie Turner, Memphis, Lieut.
Booher, William Rice, Bristol, Lieut.
Boyce, William Earl, Flatwoods, Lieut.
Boyd, Louis Frank, Memphis, Lieut.
Blackshare, Wilbur Manson, Lucy, Lieut.
Brew, James, Jr., Nashville, Capt.
Brewer, William Ansborn, Memphis, Lieut.
Brinson, Stanley Needham, Memphis, Lieut.
Brown, Charles Walter, Memphis, Lieut.
Brown, Emmett Ezra, Nashville, Lieut.
Brown, George Lem, Memphis, Lieut.
Brown, Polk Duncan, McMinnville, Capt.
Bryan, James Leslie, Nashville, Lieut.
Buck, Kinsey Mansfield, Memphis, Lieut.
Bugg, George Washington (Col.), Nashville, Lieut.
Bundrant, William Clayborne, Lawrenceburg, Lieut.
Burch, Lucius Edward, Nashville, Major.

Cagle, William Dave, Lobelville, Lieut.
Caldwell, Jere Witherspoon, Nashville, Lieut.
Carnes, William Augustus, Memphis, Capt.
Carr, Charles Clay, Cumberland Gap, Lieut.
Carr, John David (Col.), Knoxville, Lieut.
Carter, Grover, Memphis, Lieut.
Cashion, William Aaron, Puryear, Lieut.
Chapman, Thomas Crowder, Brownsville, Lieut.
Chance, Joseph Harvey, Cedar Hill, Lieut.
Cliffe, Daniel Bonaparte, Franklin, Capt.
Collins, Tate Benton, Trezevant, Lieut.
Connell, Maurice L., Nashville, Lieut.
Cooper, Arthur Ferdinand, Memphis, Lieut.
Coppedge, Thomas Nelson, Memphis, Lieut.
Cotten, Leon D'Caste, Alexandria, Lieut.
Coughlin, Thomas Francis, Jr., Memphis, Capt.
Crawford, Daniel Wordsworth (Col.), Knoxville, Lieut.
Crawford, James Pringle, Nashville, Lieut.
Cunningham, John Wesley, Memphis, Capt.

Davis, Benjamin Franklin (Col.), Columbia, Lieut.
Deathridge, Owen Scott, Nashville, Lieut.
Delaney, Joseph P., Triune, Lieut.
Desprez, Louis Willoughby, Memphis, Lieut.
Dixon, William Clarence, Nashville, Capt.
Donaldson, Sam Wright, Maryville, Lieut.
Dossett, Robert Lee, Tullahoma, Lieut.
Douglass, Roy Archie, Nashville, Lieut.
Duggan, Suethen Burroughs, Eagleville, Lieut.
Dunklin, Frank Bumpass, Nashville, Lieut.
Dyer, Lloyd Elmer, Midway, Lieut.
Dykes, Llewellyn Moore, Johnson City, Lieut.

Edwards, Ernest Virgle, Knoxville, Lieut.
Edwards, Samuel Lee, Memphis, Lieut.
Edwards, William Kenneth, Centerville, Lieut.
Eldridge, Jesse Cleveland, East Chattanooga, Lieut.
Ellett, Edward Coleman, Memphis, Major.
English, Grover Cleveland, Mt. Pleasant, Lieut.
Eves, Frank Pierce, Nashville, Lieut.

Faucett, Paul Hemlin, Columbia, Lieut.
Fleming, James Surran, Memphis, Lieut.
Francisco, Howard Merchant, Nashville, Lieut.
Frazier, Claude A., Knoxville, Lieut.
Frierson, Samuel Evander, Memphis, Lieut.
Fly, James Claggett, Lyles, Lieut.
Frost, John Wilson, Fruitland, Lieut.
Fuqua, Ernest Mitchell, Nashville, Lieut.

Gillespie, Edwin Cyril, Memphis, Lieut.
Gilmore, Lucius Hough (Col.), Columbia, Lieut.
Givan, Thurman Boyd, Nashville, Lieut.
Gloster, Clarence Morgan (Col.), Brownsville, Lieut.
Glover, Clarence Hays, Memphis, Lieut.
Goodloe, Aareiel Ellis, Murfreesboro, Lieut.
Gould, Dorsey Thomas, Lawrenceburg, Lieut.
Granbery, Roy, Memphis, Lieut.
Granberry, Dorsey B. (Col.), Jackson, Lieut.
Griffin, Robert Bailey, Ridgely, Lieut.
Griffith, Charles Marion, Tullahoma, Lieut.
Gruver, Fleetwood, Nashville, Lieut.

Haggard, Douglass, Nashville, Capt.
Haggard, William David, Nashville, Major.
Hall, Gid Malcom, Lenoir City, Lieut.
Hall, Harry Edgar, St. Joseph, Lieut.
Hardison, Clyde Crawford, Iron City, Lieut.
Harper, Thomas Munesy, Medina, Lieut.
Harris, Albert Wynne, Nashville, Capt.
Harrison, Emmett Merrick, Chattanooga, Lieut.
Hatcher, George Abram, Nashville, Lieut.
Heard, Joseph Eugene, Brownsville, Lieut.
Hendley, Charles, Cottage Grove, Lieut.
Henry, John Philip, Memphis, Lieut.
Hobson, Joel Jones, Memphis, Lieut.
Hochstetter, Eugene Robert, Jr., Chattanooga, Capt.
Horton, George Elmer, Wartrace, Lieut.

Ingalls, Albert Thompson, Chattanooga, Lieut.
Ingram, Thos. Harkins, Memphis, Lieut.

Johnson, Joseph Edward, Memphis, Capt.
Jones, Andrew Blucher, Nashville, Lieut.

Kaplan, Max, Memphis, Lieut.
Keller, Lawrence Larry, McMinnville, Lieut.
Kennon, William Gilliam, Nashville, Lieut.
Kimbrough, James Claude, Nashville, Lieut.
King, Aubin Tilden, Jefferson City, Lieut.
King, Charles Coefield, Memphis, Lieut.
Kirby-Smith, Reynold Marvin, Sewanee, Major.
Kirkpatrick, Jere Wilhams, So. Pittsburg, Lieut.

Lacy, Justin Ernest, Jasper, Lieut.
Lanier, Leon Martin, Nashville, Lieut.
Lassiter, John Henry, Nashville, Lieut.
Leach, Jesse Leonidas (Col.), Nashville, Lieut.
Lear, Allen Lawrence, Sewanee, Lieut.
Lee, Frederick Willson, Springfield, Lieut.
Lee, John Moore, Nashville, Lieut.
Levy, Gilbert Joseph, Memphis, Lieut.

Lo[illegible] Louis, Memphis, Lieut.
[illegible]ssex, Lawrence Johnson, Covington, Lieut.
Long, Samuel Harrison, Chattanooga, Lieut.
Lotte, Benjamin, [illegible], Dyer City, Lieut.
Lyons, Clinton Gallaher, Knoxville, Lieut.

McCabe, William Michael, Nashville, Capt.
McCaleb, Walter Lee, [illegible]boro, Lieut.
McGannon, Matthew Charles, Nashville, Major.
McCorkhy, Grover Warren, Ekds, Lieut.
McGehee, Jesse Lucas, Memphis, Capt.
McCleton, Frank Cole, Nashville, Lieut.
McGrory, Joseph Ray, Pall Bearer, Lieut.
McKinney, Thomas Dempsey, Nashville, Lieut.
McMillan, Richard Cockrill, Memphis, Capt.
McPherrin, Jesse Douglas, Chattanooga, Lieut.
McSwain, George H., Paris, Lieut.

Malone, William Battle, Memphis, Major.
Mann, Hiram Bradford, Memphis, Lieut.
Marable, John Hartwell, Cowan, Capt.
Martin, Isaiah Herbert (Col.), Nashville, Lieut.
Mason, Eustace Cosmo, Bon Air, Lieut.
Mauney, John Owsley, Nashville, Lieut.
Mashburn, Neely Cornelius, Bolivar, Lieut.
Mason, Robin Ferguson, Memphis, Lieut.
Miller, Edwin Evans, Nashville, Lieut.
Miller, John Samuel, Collierville, Lieut.
Minor, Dabney, Cleveland, Lieut.
Mitchell, Edward Clay, Memphis, Capt.
Maxwell, E. Gacovia, Darden, Lieut.
Means, Ray Morrison, Chattanooga, Lieut.
Meyer, John Leopold, Memphis, Capt.
Mitchell, Thomas Albert, Nashville, Lieut.
Moody, Samuel Shaw, Shelbyville, Lieut.
Morris, John Walter, Somerville, Lieut.

Niles, William Huffman, Tellico Plains, Lieut.
Noblitt, Boone Edgar, Fayetteville, Lieut.
Nolen, Beverly Toon, Franklin, Lieut.

O'Connor, Fleming James, Jackson, Lieut.
Odom, Cleve Carrington, So. Nashville, Lieut.
Oliver, James Mathew, Portland, Lieut.
Orr, Eugene Moore, Nashville, Lieut.
Oursler, John Walter, Humboldt, Lieut.
Overton, John, Nashville, Capt.
Owens, James Patrick, Memphis, Lieut.

Payne, Cleveland, Oakland, Lieut.
Pillow, Robert, Jr., Columbia, Lieut.
Porter, Otsy James, Columbia, Capt.
Pruett, William Veasy, Brownsville, Lieut.

Reeser, Guy McClellan, Church Hill, Lieut.
Rhodes, Thomas Whitson, Whiteville, Lieut.
Richardson, Charles Thomas, Memphis, Lieut.
Roberts, Gilbert Madison, Chattanooga, Lieut.
Ross, Edward Barber, Clarksville, Lieut.
Rucker, Jonathan Nathaniel (Col.), Gallatin, Lieut.
Rucks, Walker Lee, Memphis, Lieut.
Russell, Joseph Ward, Nashville, Lieut.

Sage, Abner Potts Hubert, Memphis, Lieut.
Saunders, William Gilchrist, Jackson, Lieut.
Schoolfield, Benjamin Lucky, Memphis, Lieut.
Seay, John Grandy, Germantown, Lieut.
Sellen, Robert Raymond, Erwin, Lieut.
Shea, John Joseph, Memphis, Lieut.
Shelton, Joseph Richard, Petros, Lieut.
Shelton, William Asa, Oliver Springs, Lieut.
Shoulders, Harrison H., Nashville, Lieut.
Skaggs, James Stirling, Maynardsville, Lieut.
Smythe, Frank David, Memphis, Major.
Smythe, Frank Ward, Memphis, Lieut.
Snoddy, Gary Alexander, Knoxville, Major.
Spingarn, Marcus Gustavus, Memphis, Lieut.
Stanford, James Butt, Memphis, Lieut.
Steele, John Black, Chattanooga, Lieut.
Stewart, Edward Sarter, Summertown, Lieut.
St. John, Joe Harold, Nashville, Lieut.
Stokes, Hugo Benton (Col.), Nashville, Lieut.
Stone, Fred Oscar, Maynardsville, Lieut.
Stone, Lee Alexander, Memphis, Capt.
Sullivan, Robert Edward, Nashville, Lieut.
Summers, Charles Kincaid, Memphis, Capt.
Summers, Davis King, Lieut.
Sundstrom, Carl August G., Chattanooga, Lieut.
Swink, Walter Thomas, Memphis, Capt.

Thomas, James Rodefer, Memphis, Lieut.
Thompson, Edward Grace, Memphis, Lieut.
Tucker, Herbert M., Nashville, Capt.
[illegible]tzgerald, Percy John, Ripley, Lieut.
Troxler, William Everett, Lewisburg, Lieut.
Turner, Elbert Sharon, LaFayette, Lieut.

[illegible]derwood, Robert Bowden, Memphis, Lieut.

Vaden, Frank Cady, Memphis, Lieut.

Walley, Samuel Lewis, Memphis, Lieut.
Wagner, Matthias Miller, Chattanooga, Lieut.
Walker, Henry Harvey (Col.), Nashville, Lieut.
Walker, Granville Inman, Savannah, Lieut.
Walton, Charles Douglas, Gordonsburg, Lieut.
Watkins, Edwin Lee, Chattanooga, Capt.
Watkins, John Thomas, Nashville, Lieut.
Welker, Leo Edward (Col.), Nashville, Lieut.
Wilkerson, Lonnie Otts, Stanton, Lieut.
Wilkins, Ellis LeRoy, Dyersburg, Lieut.
Wilson, George Edward, Rockwood, Lieut.
Wilson, Russell Bate, Gates, Lieut.
Winters, William Winfred, Greenbrier, Lieut.
Witt, William Henry, Nashville, Major.
Woodring, Thomas Volney, Nashville, Lieut.
Wright, Joe Bradford, Pulaski, Lieut.
Wysong, Homer Clytus, Beech Grove, Lieut.

TEXAS

Acton, George Parrish, Sherman, Lieut.
Adair, Munsell Lee, Galveston, Lieut.
Adams, Joseph Edward, Clayton, Lieut.
Akehurst, Roy Leighton, Hockley, Lieut.
Allen, Robert Russell, Dallas, Lieut.
Ament, Lytton Gray, Victoria, Lieut.
Arnold, Enga Mitchell, Houston, Lieut.
Arnold, Everette Odell, Corpus Christi, Lieut.
Atkinson, Newell Wrigley, Alice, Lieut.
Aves, Charles Marion, Houston, Capt.
Aves, Delano Richard, Seabrook, Lieut.

Baber, Wm. Lafayette, Winneboro, Lieut.
Bailey, Robert, Coleman, Lieut.
Ballew, James Morgan, Memphis, Capt.
Bailiff, Henry Carroll, Temple, Lieut.
Bannister, James Madison, Snyder, Capt.
Barnard, Wm. Calvert, Corpus Christi, Lieut.
Barrett, Frances Oliver, El Paso, Lieut.
Barron, William Powers, Rusk, Lieut.
Barton, William Peyton, Overton, Lieut.
Bassett, Wm. Moorman, San Antonio, Lieut.
Baugh, Verner Lena, Crafton, Lieut.
Bauguss, John Beaumont, Whitewright, Lieut.
Baylis, Henry Eugene, Huntsville, Lieut.
Beech, Thomas Richard, Slaton, Lieut.
Benson, Harold Augustus, Camp Ft. Bliss, Lieut.
Bergfeld, Arthur Wm. Chas., Seguin, Lieut.
Bernard, John Thomas, Dallas, Lieut.
Bertner, Ernest William, Houston, Lieut.
Beverly, Albert Fitzhugh, Austin, Capt.
Blair, Faris M., Ft. Bliss, Lieut.
Blake, John Vaughn, Floresville, Capt.
Bledsoe, Robert Emmet, Taylor, Lieut.
Blow, Frank Teeple, Call, Lieut.
Boehs, Charles John, Ft. Sam Houston, Major.
Boethal, Nicholas Charles, Leroy, Lieut.
Bonner, William F., San Antonio, Capt.
Boren, Edgar Rufus, Belton, Lieut.
Bowman, Paul N., Ft. Sam Houston, Capt.
Bowman, Newton Harrison, Beeville, Capt.
Bradbrook, Henry, Cat Springs, Lieut.
Bradford, Henry C., Brownsville, Capt.
Braun, Isador, Shiner, Lieut.
Breihan, Ernest Winfred, Bartlett, Lieut.
Brook, Danie Heard, Travis, Lieut.
Brooks, Henry, Von Ormy, Lieut.
Brooks, Thomas Cottrell, Bay City, Capt.
Brown, Alexander Aaron, San Antonio, Lieut.
Brown, Eli Edwin, Dallas, Lieut.
Brown, John Wm., Pearsall, Lieut.
Browne, Wm. Claiborne, Midlothian, Lieut.
Brownlee, Charles Hansford, Burnet, Lieut.
Bruton, Emmett B., Mosquito, Lieut.
Buchanan, Charles Clifton, Houston, Lieut.
Buie, James Shaw, Hillsboro, Lieut.
Bullock, Charles Read, Snyder, Lieut.
Bundy, Orville Taylor, Hutto, Lieut.
Burk, Wm. Edward, Sweetwater, Lieut.
Burnett, Thomas Raynes, Carrollton, Lieut.

Burns, Edward Jackson, Carrizo Springs, Lieut.
[illegible], Norman Albert, Port Arthur, Lieut.
Byars, Casper R., Ft. Clark, Major.

Cae, Wm. Henry, Jr., Galveston, Lieut.
Cadenhead, James Frank, Weinert, Lieut.
Cain, William R., El Paso, Lieut.
Campbell, Joseph Edward, El Paso, Lieut.
Campbell, Wm. Edgar, Cedar Creek, Lieut.
Carr, Marcus Miller, Dallas, Lieut.
Carruthers, Francis Walter, Hillsboro, Lieut.
Carter, Coleman J., Oakwoods, Lieut.
Carter, Noah Dilford, Robstown, Lieut.
Carter, Wilbur, Sherman, Lieut.
Cash, W. Aada Vee, Abilene, Lieut.
Chambers, Karl, Jasper, Lieut.
Chambers, Wm. Franklin, Bronte, Lieut.
Clark, Archibald Fletcher, Fentress, Lieut.
Clark, Hines, Crowell, Lieut.
Clark, J. Frank, Harrold, Lieut.
Clark, Vester Varden, Estelline, Lieut.
Clayton, Charles Fielding, Hubbard, Lieut.
Cochran, Robert Henry, Coleman, Lieut.
Cockenham, Louis Hampton, Palestine, Lieut.
Colin, Maurice Herbert, Ft. Worth, Lieut.
Coleman, Robert Henry, Whitesboro, Lieut.
Collins, Edward Everett, Fremont, Lieut.
Collins, Joseph D., Arlington, Lieut.
Colwick, James Thomas, Dallas, Lieut.
Conley, James Weaver, Saron, Lieut.
Connor, Paul James, Madisonville, Lieut.
Cook, Richard Lloyd, Ft. Sam Houston, Capt.
Cooke, Charles Christopher, Cleburne, Lieut.
Cooke, Edward Fenton, Houston, Lieut.
Cooke, Frederick Donald, Alvarado, Lieut.
Cooper, Jackson Stewart, Dallas, Lieut.
Cooke, James Elmore, Mart, Lieut.
Cooley, Wm. Henry, Sarita, Lieut.
Cravens, Wm. Elbert, Southland, Lieut.
Crosthwait, Wm. Lafayette, Waco, Capt.
Cummins, Erwin Jeptha, El Paso, Lieut.
Cunningham, Ozro White, Valley View, Lieut.
Currie, Reese Frierson, Mancha, Lieut.

Darby, Tilghman Opta, Sour Lake, Lieut.
Darnall, Herbert Othello, El Paso, Lieut.
Davis, Hugh Jefferson, Austin, Lieut.
Davis, Raleigh Lester, Big Spring, Lieut.
Dawe, Willie Thomas, Gonzales, Lieut.
Day, Giles Warren, Ft. Worth, Lieut.
Deason, Giles Arthur, Henderson, Lieut.
Devendorf, Louis Elmer, Taft, Lieut.
Dickason, Ezra E., Brownsville, Lieut.
Dinwiddie, Robert Lee, San Antonio, Lieut.
Dix, Isaac Arnett, Otto, Lieut.
Dobbs, James Cale, Austin, Lieut.
Doole, Thomas Paul, Eagle Lake, Capt.
Dorsett, Theo., Gonzales, Capt.
Douglas, George Malden, Martindale, Lieut.
Dozier, Jos. Vincent, Menard, Lieut.
Drake, Clarence Eugene, Brownsville, Capt.
Duggan, Malone, San Antonio, Capt.
Duncan, Douglas Shearer, Frisco, Lieut.
Dunning, Wm. Townsend, Gonzales, Lieut.
Dupree, Wilber A., Alpin, Lieut.
DuPuy, Howard Barham, San Antonio, Lieut.

Eber, Albert H., El Paso, Major.
Edwards, Douglas Saunders, San Antonio, Lieut.
Egbert, Orville Evans, Beeville, Lieut.
Elkins, Homer Thurel, Sinton, Lieut.
Ellis, J. C., Jr., Denison, Lieut.
Ellis, John Washington, Killeen, Lieut.
Erwin, John Henry, Dallas, Lieut.

Fancher, Richard Maxwell, Houston, Lieut.
Pascoe, James B., Laredo, Major.
Faulk, Lem, Alba, Lieut.
Ferrell, Hubert, Tyler, Lieut.
Field, Knight Wm., Dallas, Lieut.
Fillmore, Hartson Dustin, Maryneal, Lieut.
Fitzpatrick, Wm. Worde, Paris, Capt.
Fitzsimmons, Charles Erasmus, Amarillo, Lieut.
Forrester, Robert Early, Burleson, Lieut.
Flynn, James G., Ft. Crockett, Capt.
Ford, John Folkner, Dallas, Lieut.
Fowler, Forrest Francis, Round Rock, Lieut.
Frazier, Leland, Westville, Lieut.
Franklow, Charles Davis, Shiro, Lieut.
Frechet, Eugene Alphonse, Frisco, Lieut.
Fuller, Martin Luther, Bradshaw, Lieut.

Gain, Omar Oral, Dublin, Lieut.
Gallagher, Paul, El Paso, Lieut.
Galloway, Allan Hubert, Laneville, Lieut.
Gamble, Jesse Franklin, Houston, Lieut.
Gant, Charles E., Graham, Lieut.
Garrett, George Harvey, Del Rio, Capt.
Gates, Ellis Franklin, Dilley, Lieut.
Gee, Othel Jefferson, Timpson, Lieut.
Gibbs, James Philip, Houston, Capt.
Gibson, Benjamin Franklin, Lufkin, Lieut.
Gibson, John Francis, Paris, Lieut.
Gilbert, Elmore Bruce, Tahoha, Lieut.
Gilcreest, Edgar Lorrington, Gainesville, Lieut.
Gill, John James, Lamasco, Lieut.
Gist, Robert Dennis, Amarillo, Capt.
Glover, George Edward, Refugio, Lieut.
Goar, Everett Logan, Houston, Lieut.
[illegible], Capt.
Goodwin, Orren Pakenham, Lamasco, Lieut.
Gordon, Robert Augustus, Lorena, Lieut.
Gough, Homer Wilford, Brownwood, Lieut.
Graham, Gideon, Gonzales, Lieut.
Graves, Joseph Henry, Waco, Lieut.
Gray, Charles Washington, El Campo, Lieut.
Gray, Denver Francis, Gause, Lieut.
Griffin, Sam Randall, Canyon, Lieut.
Grimes, Robert Irwin, Sylvester, Lieut.
Grimes, Ivison, Camden, Lieut.
Grisso, D., Ft. Worth, Lieut.
Guenther, John G., Moulton, Lieut.
Gunn, Wallace Benton, Refugio, Lieut.

Hadley, Wilmer Amos, Glazier, Lieut.
Hadra, Frederick, San Antonio, Major.
Haggard, Charles Houston, Galveston, Lieut.
Haggard, Fred Andrew, Ft. Worth, Lieut.
Hall, Jesse Lee, Bertram, Lieut.
Hall, Taibert Marion, Osage, Lieut.
Halsell, John Tucker, Laredo, Capt.
Hamilton, Ernest Hubbard, Kilgen, Lieut.
Hamilton, Robert Lee, Matador, Lieut.
Handley, James Jefferson, Greenville, Lieut.
Handly, Lucius Lamar, Houston, Tex.
[illegible], San Antonio, Capt.
Harber, Harry Paul, San Saba, Lieut.
Harrell, Theodore Hudson, Gonzales, Capt.
Harris, Wm. Thomas, San Antonio, Lieut.
Harrison, Frank, Ralls, Lieut.
Harrison, John Whitworth, Palacias, Lieut.
Heard, Allen George, Galveston, Lieut.
Hearn, Robert Eldridge, Mabank, Lieut.
Hendricks, Charles McChristie, El Paso, Capt.
Hendry, Cullen Haygood, Georgetown, Lieut.
Henry, Edgar Vernon, Coleman, Lieut.
Herndon, Jesse Harmon, Atlanta, Lieut.
Hewitt, John Michael, Kingsville, Major.
Hicks, Joseph Harkess, Denton, Lieut.
Higgins, Pierre Francis, Ft. Worth, Lieut.
Hill, James Wallace, Dallas, Lieut.
Hinde, Hubbard Kavanaugh, San Angelo, Lieut.
Hirzel, Walter Christian, San Antonio, Lieut.
Hodges, Eren Daffin, Waco, Lieut.
Holt, C. Zeno, Texline, Lieut.
Hooper, John Marion, Archer City, Lieut.
Horn, Wm. Sullivan, Ft. Worth, Lieut.
Horton, Robert Wynne, Smiley, Lieut.
Howe, Thomas S., Del Rio, Major.
Howell, Robert Lee, Snyder, Lieut.
Howser, John Paul, Abilene, Lieut.
Hudson, Frederick Edward, Anson, Lieut.
Hurley, Charles Olliver, Ft. Worth, Lieut.
Hutchison, Melvin Lafayette, Dallas, Lieut.
Hyder, Doctor Columbus, Commerce, Lieut.

Inmon, Etner Holmes, Tahoka, Lieut.

Jennings, Thomas Vellie, Winters, Lieut.
Jennings, Wm. Americus, Park Springs, Lieut.
Johnson, James Jefferson, Sulphur Springs, Lieut.
Johnson, Levy Steven, Richmond, Lieut.
Johnson, Walter Conroy, Pharr, Lieut.
Johnson, William Morgan W., Rosston, Lieut.
Johnson, Wm. Riley, Snyder, Lieut.
Jones, Benjamin Franklin, Austin, Lieut.
Jones, Joseph Schoolfield, Galveston, Capt.
Jones, George E., Ft. Bliss, Capt.
Jones, Sullivan Ross, Waco, Lieut.
Jones, Whitmel Harley, Humole, Lieut.
Kahn, Isidore Stanley, San Antonio, Capt.

[illegible] Texas, Lieut.
[illegible]
[illegible]
[illegible]

[illegible] Lieut.
[illegible]
[illegible] Lieut.
[illegible] San Antonio, Lieut.
[illegible] Lieut.
[illegible] Austin Lieut.

La Garde, [illegible] Ft. Bliss Lieut.
[illegible]
[illegible] Lone Oak Lieut.
Langworthy, George Lucene, Lakeview, Lieut.
[illegible] San Antonio, Lieut.
[illegible] Antoch, Lieut.
[illegible] Marlin, Lieut.
Livingston, Joseph Jerome, Tyler, Lieut.
[illegible]
Loew, Harry Kamnis, Brownsville, Major.
Logsdon, Harry Allan, Ft. Worth, Lieut.
[illegible] Houston, Lieut.
[illegible] Capt.
Lowry, Robert Kaskie, Temple, Lieut.
Luehrs, Henry E., Mathis, Lieut.
Lummis, Frederick Rice, Houston, Lieut.
Lynch, Woods Walker, Midland, Capt.
Lyon, William Hartford, Rockdale, Lieut.

McAdon, Llewellyn East, San Antonio, Lieut.
[illegible] Capt.
[illegible] Roswell, Lieut.
[illegible] Ballinger, Lieut.
[illegible] Gloucester, Lieut.
[illegible] San Antonio, Major.
[illegible]
[illegible] Lieut.
[illegible] Capt.
[illegible] Lieut.
[illegible] Lieut.
[illegible] Shamrock, Lieut.
[illegible] Commerce, Capt.
[illegible] Georgetown, Lieut.
[illegible] Lieut.
[illegible] Lieut.
[illegible] El Paso, Capt.
[illegible]
[illegible] Lieut.
[illegible] Capt.
[illegible]
[illegible] Lieut.
[illegible] Capt.
[illegible] Lieut.
[illegible] Lieut.
[illegible] Capt.
[illegible] Lieut.
[illegible] Capt.
[illegible] Lieut.
[illegible] Galveston, Lieut.
[illegible] El Paso, Capt.

Mathewson, Ezra Hinman, Dallas, Lieut.
Mathis, Edgar Gordon, Austin, Lieut.
Mathews, Walter James, Abilene, Capt.
Michael, Jeffrey Charles, Houston, Lieut.
Miller, Garnett, Moody, Lieut
Miller, George Brady, Llano, Lieut.
[illegible] Capt.
[illegible]
Mitchner, James McCalla, [illegible]
Mondrick, Albert Ludwig, Bryan, Lieut
[illegible]
Montgomery, James Thomas, [illegible]
Morrison, Murphy M., Benison, Lieut.
Monroe, Dana Elbra, Cameron, Lieut
[illegible] San Antonio, [illegible]
[illegible]
[illegible]
[illegible]
Mueller, George Adolph, San Antonio, Lieut.
[illegible]
[illegible]
[illegible]
[illegible]
Myrick, Edwin Lethridge, Ft. Worth, Lieut.

Neal, Wesley Shropshire, Weatherford, Lieut.
[illegible]
[illegible]
[illegible]
[illegible]
Nicholson, Harold Earl, [illegible]
Nifong, Harry Davis, Britton, Lieut.
Nooe, John Francis, Boerne, Capt.
Norris, John, Park Springs, Lieut.
[illegible]

O'Farrell, John Marcus, Richmond, Capt.

[illegible] Roy Alton, San Angelo, Lieut.
[illegible]
[illegible] Ft. Sam Houston, Capt.
[illegible]
[illegible]
[illegible]
[illegible]

Paige, Wendell Hall, Leeanwood, Lieut.
Parnell, Luther D., Waxahatchie, Lieut.
Parrott, Farley Crawford, Lott, Lieut
[illegible] San Antonio, Capt.
[illegible]
[illegible]
[illegible] Cliff, Lieut.
[illegible] Cliff, Lieut.
Pember, Clyde Harry, Denison, Lieut
Penrose, Thomas W., Marathon, Capt.
Phillips, John Henry, Rosebud, Lieut.
Pickett, Henry William, Sulphur Springs, Lieut.
[illegible]
Potthast, Otto James, San Antonio, Lieut.
[illegible]
Powell, Eugene Vernon, Houston, Lieut.
Prather, Robert Marion, Beeville, Lieut
[illegible]
Pridgen, Ross Edwin, Oakland, Lieut
Punche, Albert Emerson, Cleburne, Lieut.
Purviance, Walter, Pampa, Lieut.
Putnam, Lincoln Frank, Blessing, Lieut.

Quay, John Edward, Waco, Lieut.

Ralston, Wallace, Houston, Capt.
[illegible]
[illegible]
Ratliff, Thomas Jackson, Colorado, Lieut.
Rayburn, Clute Edward, Waco, Lieut.
Rea, Green Lee, Mumford, Lieut.
Rea, Melvin Oscar, Dallas, Lieut
Reagan, Charles Haskins, Beeville, Lieut.
Ricker, Charles David, Fabens, Capt.
Ricks, George Newton, Pleasanton, Lieut.
Ricks, Henry Crozier, Sherman, Lieut.
Roach, Thomas Nelson, Medicine Mound, Lieut.
Roberts, Aaron Lamar, Lewisville, Lieut.
Robertson, Joseph J., Kingsville, Lieut.
Roaten, Shelley Poe, Eastland, Lieut.
Robison, Dutch Kilge, Itasca, Lieut.
Ryan, Hugh Earl, Milford, Lieut.
Ryan, William Patrick, Ft. Bliss, Lieut.

Salmon, Robinson Herman, Maypearl, Lieut.
Sanders, D. Leon, Wills Point, Lieut.
Sanders, Frank Gay, Ft. Worth, Lieut.
Schenck, Charles Plume, Waco, Lieut.
Schilling, John Gaillard, Cedar Bayou, Lieut.
Schultz, William Morton, Georgetown, Lieut.
Schulze, Emile Clemens, Shiner, Lieut
Schwarz, Edwin Grover, Lockhart, Lieut.
Scull, Charles E., San Antonio, Lieut.
Sealy, Thomas Richard, Santa Anna, Lieut.
Shaddin, James Walter, Marietta, Lieut.
[illegible]
Shaw, Frank Haywood, Marlin, Lieut
Shaw, Thad, San Antonio, Lieut.
Sheppard, Paul Richards Eddings, Terrell, Lieut.
Simpson, James Asa, Mission, Lieut.
Singleton, Robert Oliver, Mineral Wells, Lieut.
[illegible]
Smith, Benj. Franklin, Jr., Galveston, Lieut.
Smith, Bernard Fletcher, San Antonio, Capt.
Smith, Clifford Talbot, Houston, Lieut
Smith, Henry Templeton, Dallas, Lieut.
Smith, Oliver Abraham, Mansfield, Lieut.
Smith, William Hale, Hende, Lieut.
Spangler, Davis, Sherman, Lieut.
[illegible] Major.
Speer, Doc Milner, Celina, Lieut.
Spier, Ross Clair, Houston, Lieut.
Stacey, Royal K., Minerva, Capt.
Stagner, George Herbert, Waco, Lieut.
Standler, Thomas Hill, Lyra, Lieut.
Stark, Ernst Hanie, Paris, Capt.
Steele, Edmond Harris B., Depot, Lieut.
Stein, John Francis, Denison, Lieut.
Stephens, Jamie D., Temple, Lieut.
Stevenson, Charles William, Loraine, Lieut.
Steves, Ernest Jackson, San Antonio, Lieut.
[illegible]
Stuckey, Harrison W., Ft. Sam Houston, Lieut.
Sweatland, Arthur Elias, Nacogoches, Capt.
Sweatt, Osce Pierce, Waxahachie, Lieut.

Tabor, George Reed, Dallas, Lieut.
Terrell, Caleb O., Ranger, Lieut.
Thompson, James Edwin, Galveston, Major.
Thornton, Lyle Gunn, Westpoint, Lieut.
Thrasher, Benjamin Oscar, Gainesville, Major.
Timmins, Oliver Hazzard, San Antonio, Lieut.
Tindall, Charles Henry, Appleby, Lieut.
Tisdale, Edward William, Clyde, Lieut.
Toomin, Emanuel, Waco, Lieut.
Touchstone, Jay Lester, Dallas, Lieut.
Townsend, Edwin Ray, Llano, Lieut.
Trible, John James, Port Lavoca, Lieut.
Trible, John Metcalf, Cuero, Lieut.
Trumbull, Robert Augustus, Dallas, Lieut.
Turney, Marvin Luther, Fort Stockton, Lieut.
Turrentine, Lewis Edward, Tahoka, Lieut.

Vaughan, Thomas Davis, Taylor, Lieut.
Van Zandt, George Thomas, Cameron, Lieut.
Venable, Charles Scott, San Antonio, Major.
Venable, Douglas R., Sherman, Lieut.
Venable, John M., San Antonio, Lieut.
Vinsant, William J., San Benito, Lieut.

Wages, Allen Deering, Ralls, Lieut.
Walker, John Hale, Alvord, Lieut.
Ward, Rawley Watt, Victoria, Lieut.
Warner, William Arthur, Claude, Lieut.
Watt, William E., Austin, Lieut.
Weir, William C., Eddy, Lieut.
Welther, Fred Paul, El Paso, Lieut.
Wesson, Miley B., El Paso, Capt.
White, H. Allen, Corpus Christi, Lieut.
White, John Linely, Houston, Lieut.
Whittington, Harris Dias, Eastland, Lieut.
Wilkins, Geo. M. (Col.), Victoria, Lieut.
Wilkinson, James Arthur, Blooming Grove, Lieut.
Williams, David C., Post, Lieut.
Williams, Thomas Spaulding, Dallas, Lieut.
Williams, William Orin, Houston, Lieut.
Wilson, Roy DeLisle, Houston, Lieut.
Wolfe, Jos. Alfred Lewis, Van Alstyne, Lieut.
Womack, Jesse Lee, Lolita, Capt.
Woods, George Sidney, Devine, Lieut.
Wooley, Talmage Oliver, Germantown, Lieut.
Woolsey, Jefferson, Karnes City, Capt.
Worsham, Archer Ben, Brashear, Lieut.
Wright, William Garver, Farmersville, Lieut.
Wyneken, Henry Otto, San Antonio, Lieut.

Yeager, Charles Philip, San Antonio, Lieut.
Yeager, B. Frank, Temple, Lieut.
Young, Carl Buchanan, Jr., Houston, Lieut.

VIRGINIA

Amory, Otis Taylor, Newport News, Lieut.
Anderson, James Brent, Moreland, Lieut.
Anderson, James Whitney, Norfolk, Lieut.
Anderson, Meriweather Lewis, Richmond, Lieut.
Anderson, Paul Vernon, Richmond, Lieut.
Ardan, Nicholas, Bristol, Lieut.

Bailey, Clyde Lester, Sutherlin, Lieut.
Baldwin, Dana Olden, Martinsville, Lieut.
Barker, James Archie, National Soldiers' Home, Capt.
Barksdale, George Edward, Richmond, Lieut.
Barney, Joseph Nicholson, Fredericksburg, Capt.
Barron, Archie Alexander, Richmond, Lieut.
Barrow, Bernard, Barrow's Store, Lieut.
Bass, Urbane Francie, Fredericksburg, Lieut.
Baughman, Greer, Richmond, Lieut.
Bennett, James Allen, Norfolk, Lieut.
Berkley, Stanhope Berk, Madisonville, Lieut.
Beverley, Edward Percy, Broad Run, Lieut.
Black, Allen Jackson, Hollins, Lieut.
Blankinship, Oliver Francis, Richmond, Lieut.
Boisseau, James Gordon, Richmond, Lieut.
Brady, Henry Adrian, Danville, Lieut.
Brent, William Landon, Colonial Beach, Lieut.
Broocks, Edward Ballard, University, Lieut.
Brown, Joseph Mario, Buena Vista, Lieut.
Brunk, Oliver C., Richmond, Lieut.
Bryan, Robert Coalter, Richmond, Major.
Burger, James Spencer, City Point, Lieut.
Butler, Bruce Fowler, Newport News, Lieut.

Caldwell, Bernie Reeve, New Castle, Lieut.
Carroll, Patrick Michael, Richmond, Lieut.
Cary, Samuel Beverly, Roanoke, Lieut.
Caudill, Walter Cleveland, Pearisburg, Lieut.
Chewning, William Jeffries, The Plains, Lieut.
Clayborne, Moses, Boone Mill, Lieut.
Coffman, [illegible], Richmond, Lieut.
Compton, [illegible], Front Royal, Lieut.
Cooke, Robert Page, Front Royal, Lieut.
Cottrell, Samuel Smith, Richmond, Lieut.
Crank, Gilbert Octavius, Madison Heights, Lieut.
Crawford, Baxter Lindsay, Richmond, Lieut.
Crittenden, Edward, New Church, Lieut.
Crute, Charles Bedsoe, Farmville, Lieut.

Davis, Charles Frank, Jr., Mt. Pleasant, Lieut.
Davis, Robert Allen, Newport News, Lieut.
Dillard, Malcolm Paul, Center Cross, Lieut.
Dodd, Thomas Franklin, Alexandria, Lieut.
Driver, Wilson Elliott, Norfolk, Capt.
Dunford, Joseph Clinton, Portsmouth, Lieut.
Dunnington, John Hughes, Farmville, Lieut.
Dutton, Benjamin Blanton, Winchester, Lieut.

Easter, Clay Miller, Chincoteague Island, Lieut.
Eastham, Cranville, Rapidan, Lieut.
Eckles, Beverley Fitzwilson, Richmond, Lieut.
Edgar, Ammi Ballinger, Old Point Comfort, Lieut.
Elder, Jeffrey Neese, Hopewell, Lieut.
Elliott, Samuel Tilden, Danville, Lieut.
Ervin, Humphrey Newton, Nat. Soldiers' Home, Lieut.
Ezekiel, Gerald Abraham, Richmond, Lieut.

Farmer, Frank Albert, Roanoke, Lieut.
Firebaugh, Thomas Clinton, Harrisonburg, Capt.
Fletcher, Howard, Fairfax, Capt.
Foley, Carroll Edward, Lovettsville, Lieut.
Foster, John Brooks, Ocean View, Lieut.
Frankland, Walter Ashby, Fort Myer, Capt.

Gage, Lucius Gaston, University, Lieut.
Gayle, Herbert Finley, Jr., Richmond, Lieut.
Geisinger, Joseph Francis, Richmond, Lieut.
Gill, Grover Bache, Tangier, Lieut.
Gill, William Wallace, Richmond, Lieut.
Coleman, Isaac Harry, Richmond, Lieut.
Goodwin, William Hall, University of Va., Major.
Graves, Menneth Dawson, Richmond, Lieut.
Graves, Stanley Hope, Norfolk, Capt.
Gwathney, Lomax, Norfolk, Capt.

Hagan, Hugh Johnson, Roanoke, Lieut.
Haller, David Alexander, Pocahontas, Lieut.
Halligan, John Bernard, Petersburg, Lieut.
Hancock, Frank, Norfolk, Capt.
Hardy, Thomas Griffin, Farmville, Lieut.
Hare, John Hampton, Newland, Lieut.
Harris, William Aquilla, Spotsylvania, Lieut.
Harrison, George Blight, Colonial Beach, Lieut.
Hawkins, Horace Taylor, Irvington, Lieut.
Hayes, Henry Jackson, Richmond, Lieut.
Haynes, Lewis Claude S., Taylor's Store, Lieut.
Herring, Alvah Livingstone, Richmond, Lieut.
Hillsman, Blanton, Richmond, Lieut.
Hodges, Frederick Murchison, Richmond, Lieut.
Hooker, Raymond Cottrell, Richmond, Lieut.
Hope, Joseph Wilton, Hampton, Capt.
Hopkins, Erasmus Guy, Glen Allen, Capt.
Hopkins, William Benjamin, Richmond, Lieut.
Hose, Harry Dresser, Hampton, Lieut.
Hulcher, Julius J., Richmond, Lieut.
Hume, Joseph Stuart, Norfolk, Lieut.
Hunter, Thomas Benjamin, Lynchburg, Lieut.
Hurst, Ira, Parksley, Lieut.
Hurt, George Samuel, Roanoke, Lieut.
Hutton, Francis Beattie, Jr., Abingdon, Lieut.
Hyde, LeRoy Walter, University, Lieut.

Jennings, Roscoe Conklin, Star, Lieut.
Johnson, Douglas Beverly (Col.), Petersburg, Lieut.

Kennon, Beverley Randolph, Norfolk, Capt.
Knewstep, William Edward, Hampton, Lieut.
Koper, Lonsdale Joseph, Fort Norfolk, Lieut.
Kyle, Bernard Howett, Lynchburg, Lieut.

Lankford, Burnley, Norfolk, Lieut.
Levinson, Frank, Hopewell, Lieut.
Lewis, Charles Howard, Richmond, Lieut.
Lucas, William Andrews, Pulaski, Lieut.

MacMurphy, George Yielle, The Plains, Lieut.
Mallory, Herbert Clifford, Greensbackville, Lieut.
Martin, James Lemuel, Staunton, Lieut.

Mar[illegible] Henry Page, Richmond, Lieut.
[illegible] Stuart, Richmond, Major.
McKinney, Joseph T[illegible], Richmond, Lieut.
Merchant, William, Powell, Manassas, Lieut.
Moore, Samuel Preston, Alexandria, Capt.
Motley, James Coleman, Accomac, Lieut.
Muse, Ernest Hunt, Roanoke, Lieut.
Musgrave, George Harrison, Hopkins, Lieut.

Nelson, Hugh Thomas, Jr., Charlottesville, Capt.
Nelson, John Garrett, Richmond, Major.
Nelson, William, Rustling, Lieut.
Neel, James Thurman, Stewart Mill, Lieut.
Newman, Walter Asbury, Manassas, Capt.
Nicholson, Neal Graham, Richmond, Lieut.
Noland, Elbert Bentley, Rectortown, Lieut.
Noland, George Armstead, Ashburn, Lieut.

Odeneal, Thomas Helm, Richmond, Lieut.
Olds, William Justin, Lurey, Capt.
Ozlin, Robert Lucas, Dundas, Lieut.

Paey, Andrew Lyman (Col.), Norfolk, Lieut.
Parker, Paul Jones, Hampton, Lieut.
Pascoe, James E., Fort Myer, Lieut.
Patterson, Edwin W., Fort Hunt, Major.
Peple, William Lowndes, Richmond, Lieut.
Phelps, Wilbur Moorhead, Staunton, Capt.
Phillips, Charles, Richmond, Lieut.
Phipps, Wayne McLean, Independence, Lieut.
Pollard, John William H., Lexington, Lieut.
Porter, William Branch, Richmond, Lieut.
Powell, Llewellyn, Alexandria, Lieut.
Pratt, Frank Cushing, Fredericksburg, Lieut.

Ramsey, Alvah, Burkeville, Lieut.
Rawlings, James Emery, Fredericksburg, Lieut.
Redwood, Frank Harrell, Richmond, Lieut.
Renn, George Alley, Norfolk, Capt.
Rhodes, Robert Lewis, Roanoke, Lieut.
Rhudy, Booker E., Richmond, Lieut.
Rhyne, Samuel Albertus, Ocean View, Lieut.
Riley, Philander Chase, Markham, Lieut.
Rodman, Nathaniel Fulford, Norfolk, Lieut.
Rollings, John Adolph, Roda, Lieut.
Rucker, Claude Nelson, Clifton Forge, Lieut.
Rusmiselie, Leslie T., Waterford, Lieut.
Ryder, Ollie Allison, Cambria, Lieut.

Sandberg, Erik Theophile, Hicks Wharf, Lieut.
Saunders, Alonzo Walter, Norton, Lieut.
Seebert, Joseph Eldred, Lexington, Lieut.
Seelinger, Harry Ralph, Norfolk, Lieut.
Shaw, William Alger, Loretto, Lieut.
Shelburne, James Thomas, Christiansburg, Lieut.
Shelton, Turner Southall, Richmond, Lieut.
Simmons, Richard Gordon, Roanoke, Major.
Sinclair, Fayette Allen, Newport News, Lieut.
Smith, Harry R., Appalachie, Lieut.
Smith, James Henderson, Richmond, Capt.
Smith, Rockwell Emerson, Crozet, Lieut.
Spilman, Robert Scott, Norfolk, Capt.
Stern, Henry Sycle, Richmond, Lieut.
Stover, John Franklin, Crabbottom, Lieut.
Styers, Robert John, Jetersville, Lieut.
Sutherland, Frederick Pelham, Roanoke, Lieut.

Taib, John Lloyd, Jr., Midlothian, Lieut.
Taubee, James Menifee, Cleveland, Lieut.
Timberlake, Robert Edward, Richmond, Lieut.
Tifton, James Walker, Pulaski, Lieut.
Travis, John Randolph, New London, Lieut.
Trow, Walter Gordon, Warrenton, Lieut.
Trower, William Bell, Fortress Monroe, Lieut.

Updike, Charles Franklin, Browntown, Capt.

Wagner, Isaac Roy, Stuarts Draft, Lieut.
Warinner, Junius Ernest, Jr., Richmond, Lieut.
Weisiger, William Robert, Richmond, Lieut.
Wiatt, Robert Graham, Richmond, Lieut.
Williams, Redding Lloyd, Norfolk, Capt.
Willis, Frank Delaplaine, Newport News, Lieut.
Wiley, William Scarff, Bristol, Lieut.
Witt, Dan Hiter, Charlottesville, Lieut.
Witten, Jack Walter, North Tazewell, Lieut.
Wood, Thomas Moss, Jr., Hampton, Lieut.
Wyatt, Hubert Lee, City Point, Lieut.
Wysor, Frank Liard, Clifton Forge, Lieut.

Young, Charles Augustus, Gore, Lieut.
Young, Edgar William, McKenney, Lieut.

Zimmerman, George Luther, Founding Mill, Lieut.

WEST VIRGINIA

Alchire, [illegible], Madison, Lieut.
Arnett, Ulysses Grant, Henderson, Lieut.
Anderson, Maury, Ward, Lieut.

Barber, Timothy Lawrence, Charleston, Capt.
Barker, Oliver Dustin, Parkersburg, Capt.
Barker, [illegible] George Holt, Charleston, Capt.
Barnes, [illegible] Harper, Wardensville, Lieut.
Barnes, Howard Maxwell, Bradley, Lieut.
Bayne, Ernest Heald, Martinsburg, Lieut.
Blair, Harry Cockerille, Harrisville, Lieut.
Bobbitt, Ray Maxwell, Huntington, Lieut.
Broschaet, Frank Joseph, Marting, Lieut.
Buckley, Emmet Richelieu, Grafton, Capt.
Buckner, Charles McVea, Huntington, Lieut.
Bull, Stephens Wilber, Spencer, Lieut.
Butler, Leroy Jefferson, Milburn, Lieut.

Cannaday, John Egerton, Charleston, Major.
Canter, Noland Mackenzie, Martinsburg, Lieut.
Clay, Clavin E., Martinsburg, Lieut.
Corbin, John Eldon, Wolf Summit, Lieut.
Covington, Lewis Clyde, Charleston, Capt.
Cowherd, Joseph Kile, Ridgeley, Lieut.
Cowie, Charles Stuart, Martinsburg, Lieut.
Cronin, Dennis Joseph, Huntington, Lieut.

Daniels, Hoddie Wilbur, Elkins, Lieut.
Davis, Edward, Salem, Lieut.
Davis, Norman Robert, Henry, Lieut.
Debell, Arthur Wise, Malden, Lieut.
Dodson, Ross, Spencer, Lieut.

Eanes, Richard Henry, Widen, Capt.
Edmundson, Richard Henry, Morgantown, Lieut.
Eltinge, Richard Lounsbery, Sterling, Lieut.

Farley, Rush Floyd, Ivaton, Lieut.
Fontain, James Morris, Charleston, Lieut.
Cather, R. Hazen, Flemington, Lieut.

Goin, Lowell Sidney, Wheeling, Lieut.
Goodwill, John Jones, Cooper, Lieut.
Greene, William Henry, Camden, Lieut.
Grisinger, George Floyd, Gamoca, Lieut.

Hanna, Martin Jay, Moundsville, Lieut.
Hardy, Irvin, Morgantown, Lieut.
Harper, Clyde Alexander, Anna, Lieut.
Harper, William Glen, Beverly, Lieut.
Hartigan, James William, Morgantown, Capt.
Hatfield, Harry Drury, Huntington, Major.
Hays, Henry Clay, Princeton, Lieut.
Hearn, William Oswell, Bluefield, Lieut.
Hicks, James Oscar, Huntington, Lieut.
Hilton, Louis Archibald (Col.), Wilcoe, Lieut.
Hott, David, Morgantown, Capt.
Houke, Rae Ellsworth, Parkersburg, Lieut.
Howard, Lewis Hoagland, Wheeling, Lieut.
Howell, Willie Herbert, Murraysville, Lieut.
Hunter, Jones Ross, Huntington, Capt.
Huth, Leo, Fallansbee, Lieut.

Jarrell, Dennis Bliss, Woodville, Lieut.
Jones, Milton Easley, Welch, Lieut.

Lake, Esley Taylor, Nuss, Lieut.
Lambert, Asahel Clarence, S. Charleston, Lieut.
Keller, Frederick Eugene, Sistersville, Lieut.
Kincaid, Herbert Clark, Summersville, Lieut.
Law, Harry Dixon, Conings, Lieut.
Laws, Charles Henry (Col.), Elkins, Lieut.
Lesage, Isaac Richard, Huntington, Lieut.
Levendoff, Israel, Weirton, Lieut.
Lickett, Dayard Lee, Mill Creek, Lieut.
Link, Michael Peter, Matewan, Lieut.
Link, Walter Scott, Parkersburg, Lieut.

McBee, Thomas Judson, Morgantown, Lieut.
McCluer, Barton Bates, Welch, Lieut.
McClung, Thaddeus C., Ronceverte, Lieut.
McCoy, George Price, Franklin, Lieut.
McLain, William Hay, Wheeling, Lieut.

Mahood, Charles Francis, Alderson, Lieut.
Morris, Albert, Charleston, Lieut.
Negrotti, Peterson, Wheeling, Lieut.
Mendeloff, Morris Isidore, Charleston, Lieut.
Moore, John Wilburn, Charleston, Capt.
Musick, Rufus Maurice, Varney, Lieut.

Owens, Harry Kight, Elkins, Capt.

Park, Clermont E., Parkersburg, Lieut.
Parker, Harry Robinson, Williamson, Lieut.
Pedicord, Rosco Means, Elm Grove, Lieut.
Pierce, George Loudon, Bower, Lieut.
Pence, George Lewis, Pence Springs, Lieut.
Pettit, Benjamin Louis, Dorothy, Lieut.
Powell, Harvey C., Morgantown, Lieut.
Powell, Rowley Holland, Fairmont, Capt.
Price, Norman Randolph, Marlinton, Lieut.

Rayl, William Lawrence, Huntington, Lieut.
Roberson, Grover Cleveland, Hurricane, Lieut.
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SOUTHERN MEDICAL NEWS

ALABAMA

Dr. W. H. Christopher, Choctaw, has begun his duties as all-time Health Officer of Choctaw County.

Dr. A. L. Nourse, physician in charge of the civilian population at Camp McClellan, Anniston, states that the health conditions of the laboratories are excellent and there is no reportable sickness.

Miss Agnes Turner, Boston, has arrived in Montgomery to begin her duties as supervising public health nurse in the Red Cross Unit No. 19.

Dr. G. C. Lake, U.S.P.H.S., has completed the reorganization of the laboratories of the State Board of Health, and has returned to Washington.

The Tuscaloosa County Medical Association held its meeting Oct. 22. The following officers were elected to fill the unexpired terms of those incumbent: President, Dr. Toombs Lawrence, succeeding Dr. W. Wood Sommers; Dr. R. H. Lister, re-elected Dr. Maxwell Moody; Health Officer, Dr. D. C. Steelesmith, succeeding Dr. J. J. Durrett.

Dr. J. J. Durrett, Tuscaloosa, has gone to Newport News, Va., to assume charge of the Newport News Health Department and the Elizabeth City and County Health Department.

Major E. G. Brackett, Boston, of the Orthopedic Division of Surgery of the U. S. Army, and Colonel W. O. Owen, formerly Curator of the Army Museum in Washington, addressed the Jefferson County Medical Society, Birmingham, on November 12.

The Madison County Medical Society, at its monthly meeting held in November, petitioned the County Commissioners to provide for an all-time health officer for Huntsville and Madison County.

Dr. H. G. Perry, of the State Health Department, has returned from Virginia and North Carolina, where he conferred with the commissions appointed to investigate vital statistics in those states.

Dr. Carl A. Grote, Jasper, has been elected all-time Health Officer of Madison County to succeed Dr. T. E. Dryer, resigned.

Transfer of M.R.C. Officers

Lieut. Ernest A. Moore, Coatopa, to Camp Hancock, Augusta, Ga.

Lieut. Howard P. Rankin, Midway, to Camp Wheeler, Macon, Ga.

Lieut. A. F. Boyd, Emelle, to Monmouth, N. J.

Lieut. James L. Bowman, Union Springs, to Neurological School, University of Pennsylvania, Philadelphia, Pa.

Lieut. E. W. Daly, Birmingham, to Kelly Field, San Antonio, Tex.

Lieut. Henry W. Grady, Birmingham, to Army Medical School, Boston, Mass.

Lieut. John M. Ball, Eufaula, and Lieut. C. V. Mayhall, Haleyville, to Camp Beauregard, Alexandria, La.

Lieut. Robert Goldthwaite, Montgomery, to Camp Jackson, Columbia, S. C.

Lieut. O. W. Little, Salco, to Camp Jackson, Columbia, S. C.

Lieut. W. C. Hatchett, Toney, to Camp Mills, Garden City, L. I.

Lieut. C. M. Wooley, Thorsby, to Camp Sevier, Greenville, S. C.

Lieut. A. B. McFadden, Bellwood, to Camp Shelby, Hattiesburg, Miss.

Lieut. L. H. Hamner, Camp Hill, to Camp Wheeler, Macon, Ga.

Lieut. Crenshaw, Hope Hull, to Camp Wheeler, Macon, Ga.

Lieut. W. S. Roberts, Lafayette, to Fort Benjamin Harrison, Ind.

Lieut. A. W. Graves, Ashland, to Fort Oglethorpe, Georgia.

Lieut. Rayford Hodges, Woodville, to Camp Oglethorpe, Ga.

Lieut. W. T. Langley, Camp Hill, to Neurological School, Chicago, Ill.

Capt. Wm. Jordan, Birmingham, to University of Pennsylvania, Philadelphia, Pa.

Capt. Chas. A. Thigpen, Montgomery, to his home on inactive list.

Capt. R. E. Hale, Bellamy, to Medical Supply Depot, Atlanta, Ga.

Lieuts. M. E. Sherer, Childersburg; M. A. Fort, Grand Bay; F. N. McConico, Montgomery; J. F. Jenkins, Gilmore; H. Moore, Opelika; J. F. Peavy, Robertsdale; J. W. Beard, Troy; Maxwell Moody, Tuscaloosa; B. B. Edwards, Union Springs, to Camp Dix, Wrightstown, N. J.

Lieuts. W. C. Dabney, Birmingham, and F. W. Young, Hartford, to Camp Gordon, Atlanta, Ga.

Lieut. J. K. Legare, Forkland, to Camp Hancock, Augusta, Ga.

Lieut. W. Y. Sherman, Albertville, to Camp Jackson, Columbia, S. C.

Lieuts. A. L. Glaze, Jr., Athens; C. W. Brasfield, Linden; J. P. Vansant, Piedmont; D. W. Ward, Tuscaloosa, to Camp Lee, Petersburg, Va.

Lieuts. S. W. Wright, Bessemer; O. L. Langley, Loachapoka; C. D. Mason, Scottsboro; J. H. Somerville, Jr., Tuscaloosa, to Camp Pike, Little Rock, Ark.

Lieuts. B. S. Cooley, Boaz; W. A. Sewell, Centre; H. Van DeVoort, Gastonburg; W. E. Allen, Ward, to Camp Upton, Yaphank, L. I.

Lieut. E. S. Hagler, Northport, to Camp Wheeler, Macon, Ga.

Capt. W. H. Oates, Mobile; Lieut. A. J. Boyd, Emelle, to Chickamauga Park, Ga.

Lieut. W. M. Caffee, Edgewater, to Camp Oglethorpe, Ga.

Lieut. L. H. Woodruff, Anniston, to Camp Greenleaf, Fort Oglethorpe, Ga.

Lieut. R. C. Stewart, Wylam, to Camp Kelly, San Antonio, Tex.

Lieut. H. P. Shugerman, Birmingham, to Camp Lee, Petersburg, Va.

Lieut. J. P. Perdue, Furman, to Camp Logan, Houston, Tex.

Lieut. Miles A. Watkins, Birmingham, to Fort Oglethorpe, Ga.

Capt. Mack Rogers, Birmingham, to Newport News, Virginia.

Lieut. W. M. Burns, Selma, to University of Pennsylvania Hospital, Philadelphia, Pa

Lieut. J. D. Staples, Camp Hugh, to his home on the inactive list.

Lieut. C. C. McLean, Birmingham, to Camp Pike, Little Rock, Ark.

Lieut. Russell Callen, Birmingham, to Camp Pike, Little Rock, Ark.

ARKANSAS

Dr. J. A. Tidwell, Saulsbury, Tenn., has removed to Blytheville, Ark.

Dr. J. G. Hilton, Mena; Dr. G. W. Connally, Hatfield, and Dr. G. A. Campbell, Rocky, attended the meeting of the Southwestern Medical Association during November.

Drs. T. F. Kittrell, S. A. Collom and T. E. Fuller, Texarkana, attended the meeting of the American College of Surgeons held in Chicago during October.

Dr. E. L. Posey, Van Buren, has moved to Magee, Miss.

Lieut. F. W. Mackory, Fort Smith, is at the Cook County Hospital, Chicago, taking a course in roentgenology.

Capt. Albert Pike, Little Rock, has received his commission in the M.R.C. and has been assigned to duty with the 177th Engineers Corps, now in France.

The Court of Ashley and Woodruff Counties has appropriated $5,000 and $2,400, respectively, for an extensive sanitary campaign.

Dr. W. C. Vandiver, Mena, has succeeded Dr. G. P. Dunman as County Health Officer of Polk County.

Dr. J. C. Geiger, U.S.P.H.S., has warned the Little Rock authorities of the dangers coincident with the existence of dry wells.

A mild epidemic of smallpox in a restricted area of Little Rock was discovered early and an intensive vaccination campaign was begun by Dr. J. C. Geiger, U.S.P.H.S. The authorities state that there is no danger of spread.

Transfer of M.R.C. Officers

Lieut. J. F. Lieberman, Pine Bluff, to Army Medical School, Washington, D. C.

Capt. H. [illegible] Fowler, Fayetteville, to Camp Devens, Ayer, Mass.

Lieut. S. J. Wolfermann, Fort Smith, to Camp Greenleaf, Fort Oglethorpe, Ga.

Lieut. M. H. Waddle, [illegible], to Camp Greenleaf, Fort Oglethorpe, Ga.

Lieut. Floyd Clardy, Jonesboro, to Camp Kelly, San Antonio, Tex.

Lieut. J. V. Fallsi, Little Rock, to Camp Sherman, Chillicothe, O.

Lieut. G. W. Embanks, [illegible], to Fort Riley, Kans.

Lieut. J. W. Butt, Helena, to Washington University, St. Louis, Mo.

Lieut. S. J. Fuller, Little Rock, to his home on discharge from the service.

Lieuts. M. C. Berry, Donaldson, and R. E. Weaver, Hope, to Camp Dix, Wrightstown, N. J.

Lieut. I. W. Ellis, Monette, to Camp Gordon, Atlanta, Ga.

Lieut. J. B. Wells, Scott, to Camp Lee, Petersburg, Va.

Lieut. E. R. Cotham, Monticello, to Camp Upton, Yaphank, L. I.

Lieut. J. C. Simpson, Hamburg, to the Rockefeller Institute, New York.

Lieut. P. H. Thompson, Jr., Clarendon, to Camp Beauregard, Alexandria, La.

Lieut. V. H. Ragsdale, Fitzhugh, to Camp Dodge, Des Moines, Iowa.

Lieuts. M. F. Houston, Clarendon; A. W. Cox, Helena, to Camp Doniphan, Fort Sill, Okla.

Lieut. Marshall Allen, O'Kean, to Camp Greenleaf, Fort Oglethorpe, Ga.

Lieut. Dewell Gann, Little Rock, to Camp Jackson, Columbia, S. C.

Lieut. Pat Murphy, Little Rock, to Camp Logan, Houston, Tex.

Capt. A. C. Thiolliere, Varner, to Camp MacArthur, Waco, Tex.

Capt. P. C. Williams, Texarkana, to Camp Benjamin Harrison, Ind.

Lieut. Loren Wallin, Dermott, to Fort Oglethorpe, Georgia.

Lieut. E. E. Poyner, Green Forest, to Fort Oglethorpe, Ga.

Capt. J. H. Harvey, Waldron, to Camp Grant, Rockford, Ill.

Lieut. Sam McA. Mauney, Earl, to Camp Pike, Little Rock, Ark.

Death

Dr. J. N. Porter, Vandevoort, aged 64, died at his home October 29.

DISTRICT OF COLUMBIA

The District of Columbia health authorities were successful in preventing a spread of diphtheria that occurred in a couple of schools during November.

The District Medical Society will erect a club house, with an amphitheatre that will accommodate six hundred persons.

The Medical Society of the District of Columbia celebrated its centennial on Oct. 17. The following made addresses on this occasion: Dr. Guy Steele, Cambridge, President of the Medical and Chirurgical Society of Maryland; Dr. John Champlain, President of the Rhode Island Medical Society; and Dr. E. B. Cooley, Danville, President of the Illinois State Medical Society. The historical address was made by Dr. Daniel S. Lamb, Washington, D. C.

Transfer of M.R.C. Officers

Lieuts. J. R. DeVelling, Washington, and E. L. Mason, Washington, to Army Medical School, Boston, Mass.

Capt. F. P. Morgan, Washington, to Camp Wheeler, Macon, Ga.

Lieut. C. W. Hyde, Washington, to Aviation Section, Signal Corps, Mineola, L. I.

Lieut. G. D. Townshend, Washington, to Neurological School, Chicago, Ill.

Capt. Earl Osterhaus, Washington, to New York for instruction in orthopedics.

Maj. C. W. Richardson, Washington, to Surgeon-General's office.

Capt. V. B. Rench, Washington, honorably discharged from M.R.C.

Lieut. W. R. Buchanan, Washington, to Camp Hancock, Augusta, G.

Lieut. J. H. Allen, Washington, to New York for instruction in orthopedics.

Majs. E. G. Siebbert and W. H. Milner, Washington, to Medical Research Board, Aviation Section, Washington.

Lieuts. Chas. Bell, Washington; W. O. Wetmore, Washington, to Camp Dix, Wrightstown, N. J.

Lieut. G. Y. MacMurphy, Washington, to Camp Sevier, Greenville, S. C.

Lieuts. H. W. Barker and H. M. Price, Washington, to Camp Chickamauga Park, Ga.

Lieut. J. A. Tilton, Washington, to Philadelphia, for instruction in orthopedics.

Lieut. H. H. Kerr, Washington, to Surgeon-General's office, Washington.

Lieuts. R. T. Haskell and S. C. Henning, Washington, to Army Medical School, Washington.

Lieut. W. F. O'Donnell, Washington, to Fort Oglethorpe, Ga.

Capt. L. Costello, Washington, to Havana, Cuba.

Lieut. J. D. Stout, Washington, to Washington University, St. Louis, Mo.

Lieut. W. H. Huntington, Washington, to be relieved of previous duties assigned him.

FLORIDA

Dr. H. H. Seelye, formerly Resident Physician of the Atlantic Beach Hotel, has begun the practice of medicine in Daytona.

The following physicians from Tampa have enlisted in the M.R.C.: Drs. R. B. McLaws, A. C. Andrews, W. C. Douglas, W. J. Lancaster, J. D. MacRae, H. McRae, F. A. Cameron, John Halliday, A. R. Bond, L. G. Larner and L. B. Mitchell.

The trachoma epidemic in various cities of Florida is reported as being under control by the Government and State officials.

The following physicians from the State were in attendance at the American Public Health Association that was held in Washington during October: Drs. B. L. Arms, George W. Simons, F. L. Watkins, Hiram Byrd, C. T. Young, A. C. Hamblin, H. O. Snow, W. A. Underwood, J. E. Taylor, F. L. Tatum, V. H. Gewinn, W. R. Warren, G. A. Dame and W. W. McDonnell.

Dr. J. H. Keene, Jacksonville, has been appointed to fill a vacancy on the State Board of Optometry.

Dr. Hiram Byrd, Scientific Secretary of the State Board of Health, has transferred his headquarters to Miami.

Dr. F. A. Brink, State Bacteriologist, has received appointment as Senior Lieutenant in the Navy Medical Corps and will become Bacteriologist at the Naval Hospital at Pensacola.

Dr. C. T. Young, formerly District Health Officer at Miami, has arrived in Jacksonville to succeed Dr. Hiram Byrd as Assistant State Health Officer.

A site at Bravard and Grand Central Avenues has been purchased by Drs. J. E. Smoak and M. R. Winton for the erection of a hospital, Tampa.

Dr. J. McMullen, U.S.P.H.S., has been detailed to the State to aid the health authorities of Riverside and other counties in the fight being waged against trachoma.

Transfer of M.R.C. Officers

Lieut. P. L. Goss, Mulberry, to Camp American University, Washington, D. C.

Capt. H. A. Peyton, Jacksonville, to Camp Dix, Wrightstown, N. J.

Lieut. H. G. Geiger, Kissimmee, to Camp Joseph E. Johnston, Jacksonville, Fla.

Lieuts. A. C. Walkup, McIntosh, and L. G. Larner, Tampa, to Camp Kelly, San Antonio, Tex.

Lieut. Everard Blackshear, Citra, to Camp MacArthur, Waco, Tex.

Deaths

Dr. E. B. Webb, Eustis, died suddenly at his home on November 14.

Dr. H. C. Abney, Port Tampa City, aged 77, died at his home on Nov. 4.

Dr. W. R. Burns, Umatilla, died at his home on Nov. 7, following an operation.

(Continued on page 28)

"I Use Ergotole in Dysmenorrhea

in one fldrm doses in hot water

every hour for three doses—then at four-hour intervals, if necessary, (which seldom happens), and my cases get thru the period with comparative comfort and with but little pain."

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(Continued from page 1000)

Capt. L. L. Pierce, Tampa, to Camp Sevier, Greenville, S. C.

Lieut. [illegible] V. Gautier, Pensacola, to Field No. 2, Mineola, L. I.

Lieut. J. N. McCartney, Miami, to Tenafly, N. Y., as Registrar with the Venereal Hospital.

Lieut. W. J. Vinson, Turner Springs, to Washington, D. C., with Report Stop Post No. 30.

Lieut. M. E. Quina, Pensacola, discharged to accept a commission in the U. S. Navy.

Lieut. O. F. Green, Mayo, honorably discharged from the service.

Lieuts. J. M. Whitfield, Malone; H. M. Beardall, Orlando; F. P. Hixon, Pensacola; D. R. Handley, Raiford, and E. H. McRae, Tampa, to Camp Dix, Wrightstown, N. J.

Lieut. Gaston Dix, Jacksonville, to Camp Greene, Charlotte, N. C.

Lieuts. D. G. Rivers, Lake City, and B. S. Stutts, Pt. St. Joe, to Camp Lee, Petersburg, Va.

Lieuts. H. C. Galey, Key West, and D. B. Williams, South Jacksonville, to Camp Meade, Annapolis Junction, Md.

Lieut. C. C. Whittle, Nocatee, to Camp Pike, Little Rock, Ark.

Lieuts. J. D. Griffin, Lakeland, and Richard Leffers, Lakeland, to Camp Upton, Yaphank, L. I.

Lieut. N. L. Gachet, Century, to Camp Wheeler, Macon, Ga.

Lieut. A. C. Watson, Live Oak, to Chickamauga Park, Ga.

Capt. R. B. McLaws, Tampa, to Linda Vista, Camp Kearney, Cal.

Lieut. J. L. Pennington, Fountain, to Mineola, L. I.

Lieut. D. M. Adams, Panama City, honorably discharged from the serivce.

Lieut. J. A. Newham, Clermont, to Camp Kelly, Hattiesburg, Miss.

Lieuts. S. A. Richardson, Jacksonville, and J. T. Bradshaw, San Antonio, to Camp Wheeler, Macon, Ga.

Lieut. L. L. LaRoche, Cocoa, to Boston, Mass., for a course in orthopedics.

Lieut. L. B. Bouchelle, Sanford, to Camp Jackson, Columbia, S. C.

Lieut. B. A. Burke, Titusville, to Camp Lee, Petersburg, Va.

Lieut. T. A. Parrish, Dania, to Fort Oglethorpe, Ga.

Lieut. E. S. Strickland, Miccosukee, honorably discharged from the service.

GEORGIA

Dr. Allen H. Bunce, Atlanta, has associated with him, Dr. A. J. Ayers, who will devote his time to laboratory diagnosis.

Dr. J. R. Beall, Augusta, has resigned as a member of the Richmond delegation in the Georgia Legislature and has removed to Alto, where he accepts a position on the staff of the State Tuberculosis Sanitarium.

The Seventh District Medical Association met at Cedartown on October 10. At this meeting Dr. W. L. Funkhouser, resigned, was succeeded as Secretary of the Association by Dr. M. M. McCord, Rome, who is now Secretary of the Floyd County Board of Health.

Dr. J. J. Hall, City Physician of Atlanta, has undergone a serious operation at a hospital in Detroit, Mich.

Dr. Paul A. Kish, Bainbridge, is having the Oak City Hotel converted into a sanitarium to be known as Kish's Non-Surgery Sanitarium

Dr. W. W. Griffith, Atlanta, has assumed his duties as House Physician at the Bainbridge Hospital.

Dr. A. L. West, Athens, has succeeded Dr. F. Y. Herrington as Interne at the Macon Hospital, the latter having joined the M.R.C.

Dr. F. C. Nesbit, Waycross, has resigned his position as City Physician and accepted a commission in the M.R.C.

The following have been appointed to serve as a Board of Health in Forsyth: Drs. George L. Alexander, President; W. P. Ponder, Secretary; and J. O. Elrod and W. J. Hencely.

The State Board of Medical Examiners announce that the license granted to Dr. Charles W. Miller, Atlanta, has been revoked on the ground that he sold forged eclectic licenses.

The Congressional District Medical Society held its annual meeting in Savannah during November. Statesboro was selected as the next meeting place and the following officers were elected: President, Dr. Robt. L. Miller, Waynesboro; Vice-Presidents: Drs. L. A. DeLoach, Glennville, and A. J. Waring, Savannah.

The following have been appointed by the Governor to fill vacancies on the State Board of Medical Examiners: Dr. A. G. Little, Valdosta, succeeding Dr. F. D. Patterson, Cuthbert, and Dr. H. W. Terrell, LaGrange, to succeed the late Dr. F. M. Ridley.

Transfer of M.R.C. Officers

Lieut. E. H. Greene, Atlanta, to Base Hospital No. 43, Atlanta, Ga.

Lieut. O. L. Miller, Atlanta, to Camp Gordon, Atlanta, Ga.

Lieuts. E. C. Seale, Atlanta, and L. F. Wright, Atlanta, to Camp Greenleaf, Fort Oglethorpe, Ga.

Lieut. J. E. Mercer, Baxley, to Camp Jackson, Columbia, S. C.

Lieut. J. J. Beaton, Waycross, to Camp Lee, Petersburg, Va.

Lieut. M. E. Perkins, Miller, to Camp Mills, Garden City, L. I.

Lieut. J. M. Anderson, Columbus, to Camp Pike, Little Rock, Ark.

Lieut. G. L. Fuquay, Savannah, to Camp Wadsworth, Spartanburg, S. C.

Lieuts. B. J. Wise, Plains; J. H. Terrell, Jr., Canon, and E. M. Townsend, Tilton, to Camp Wheeler, Macon, Ga.

Lieuts. J. H. Hall, Atlanta, and T. E. Blackburn, Swainsboro, to Mineola, L. I.

Lieut. R. F. McLeod, Pine View, to Fort Oglethorpe, Ga.

Lieut. J. W. Roberts, Jr., Atlanta, to Washington University, St. Louis, Mo.

Lieut. S. A. Alexander, Savannah, to Aviation Section, Washington, D. C.

Lieut. H. I. Reynolds, Athens, to Camp Johnston, Jacksonville, Fla.

Lieut. D. M. Silver, Augusta, to Camp Wheeler, Macon, Ga.

Capt. C. E. Dowman, Atlanta, to Neurological School, University of Pennsylvania, Philadelphia, Pa.

Lieut. H. I. Battey, Atlanta, to New York for instruction in orthopedics.

Lieut. R. C. Walker, Waycross, to Rockefeller Institute, New York, N. Y.

Capt. T. C. Davidson, Atlanta, to Walter Reed General Hospital, Tacoma Park, D. C.

Lieut. J. H. Phillips, Oakhurst, to Southern Department for assignment to duty.

Lieuts. S. T. Brown, Atlanta; J. H. Brown, Augusta; W. W. Crook, Cuthbert, and L. W. Shaw, Savannah, to Camp Gordon, Atlanta, Ga.

Lieuts. L. L. Blain, Marietta, and H. W. Wade, Quitman, to Camp Lee, Petersburg, Va.

Lieuts. A. N. Dykes, Columbus; J. F. Burkhalter, Morven, and H. C. Willis, Rome, to Camp Meade, Annapolis Junction, Md.

Lieuts. DeLamar Turner, Milledgeville, and B. P. Bradley, Rome, to Camp Pike, Little Rock, Ark.

Lieut. C. K. Sharp, Arlington, to Camp Wheeler, Macon, Ga.

Lieut. J. T. Calloway, Atlanta, to Chickamauga Park, Ga.

Lieut. E. A. Wilcox, Augusta, to Philadelphia for instruction in orthopedics.

Capt. G. A. Traylor, Augusta, to Rockefeller Institute, New York, N. Y.

Lieut. J. W. Bradley, Woodstock, to his home on the inactive list.

Lieut. J. W. Smith, Jr., Atlanta, to Army Medical School, Washington, D. C.

Lieut. Cecil Stockard, Atlanta, to Camp Beauregard, Alexandria, La.

Lieut. C. K. Holmes, Gaines, to Camp Greenleaf, Fort Oglethorpe, Ga.

Lieut. J. H. Mull, Rome, to Camp Joseph E. Johnston, Jacksonville, Fla.

Lieut. I. C. Garst, Carrollton, to Camp McClellan, Anniston, Ala.

Lieut. C. G. Scruggs, Valdosta, to Camp Sevier, Greenville, S. C.

Lieut. M. E. Perkins, Millen, to Camp Stuart, Newport News, Va.

(Continued on page 30)

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Moreover, INTEROL protects the intestinal mucous membrane against abrasion, and enables the child's bowels to move without the enervation, irritation, griping, straining, or after-constipation common to the drastic cathartics like castor oil.

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Lieut. L. P. Farmer, Spread, to Camp Wadsworth, Spartanburg, S. C.

Lieut. F. D. Rawlings, Sandersville, to Camp Wheeler, Macon, Ga.

Lieut. D. N. Matheson, Atlanta, to Fort Oglethorpe, Ga.

Lieut. J. M. Bryant, Savannah, to Fort Oglethorpe, Georgia.

Deaths

Dr. Edwin D. Newton, Athens, aged 82, died from pneumonia Oct. 19.

Dr. B. M. Woolley, Macon, aged 82, died at his home [illegible].

Dr. J. N. Tabler, formerly of Oakland City, aged 76, died at the home of his daughter in Philadelphia on [illegible].

Dr. Homer Berin, aged 35, Physician for the Tellico River Lumber Company, was killed by shooting on Nov. 5, near Tellico Plains.

Dr. Edward S. Lyndon, aged 78, died at the home of his daughter in Washington, Ga., on Nov. 8.

KENTUCKY

The Jefferson County Medical Society appropriated $500.00 toward the purchase of Liberty Bonds during the recent bond campaign.

Dr. Claude C. Crum, Jeffersonville, has been commissioned a Captain in the M.R.C.

The Kentucky State Medical Association held its annual convention at Louisville, Nov. [illegible].

Dr. W. A. Poole, Audubon, has been honorably discharged from the M.R.C. and has been appointed to the U. S. Public Health Service, with headquarters at New Orleans, La.

The Southwest Kentucky Medical Association met in Louisville on Oct. 30.

The Franklin County Medical Association held its regular monthly meeting in the office of Dr. U. V. Williams, Secretary of the Association, to celebrate the eighty-third birthday and sixty-third year as a physician of its Secretary.

Rev. C. B. Moulinier, President of the Catholic Hospital Association of America, and Regent of the Marquette University School of Medicine, Milwaukee, Wis., addressed the State Medical Association during its convention in Louisville.

The scarlet fever situation of Mt. Sterling and county is much improved.

The following officers were elected by Kentucky State Medical Association: President, J. S. Lack, of Barbourville; First Vice-President, J. L. Barker, of Pembroke; Second Vice-President, H. H. Stallard, of Pikeville; Third Vice-President, J. C. Douglas, of Franklin. The Councilors: J. N. McCormack, of Bowling Green, for Third District; R. C. McChord, of Lebanon, and J. W. Kincaid, of Catlettsburg.

Lieut. George Loewy, of the French Army Medical Corps, addressed the convention of the State Medical Association in Louisville.

The following Kentuckians have been commissioned First Lieutenants in the Medical Reserve Corps of the Army: James W. Bruce, 1411 Third Street, Louisville; Stanley B. Stroube, Edgoten; Jas. H. Pritchett, Starks Building, Louisville; R. W. Wood, R. F. C., Cynthiana; John Hall Chrisman, Owenton; Henry T. Alexander, Fulton; William E. McCormack, 423 East Lee, Louisville; Marvin C. Pents, Nicholasville; K. C. Witt, Franklin; Luther Bach, Jackson; Robert A. Irwin, Clay City; John R. Jones, Princeton; Lon B. Moraneda, Irvington; F. I. Buckner, Campbellsville; W. A. Weldon, Hardyville; George A. Robertson, Atherton Building, Louisville; H. R. Yost, Greenville; Lawrence P. Boland, Stone; David C. Donan, Morganfield; William D. Reddish, Lexington; J. P. Robards, Harrodsburg; Littleton G. Keen, Burkesville; Hugh L. McLean, Wilmore; Robt. B. Morris, Beech Creek; R. H. Tracy, 2304 West Oak, Louisville; Claud Wilson, Greenville; John H. Morris, Cadiz.

Transfer of M.R.C. Officers

Lieut. Wm. W. Leslie, Lockport, to Camp Funston, Fort Riley, Kans.

Lieut. H. C. Richmond, Louisville, to Camp Greenleaf, Fort Oglethorpe, Ga.

Lieut. O. E. Johnson, Lebanon Junction, to Camp Kelly, San Antonio, Tex.

[illegible] to Camp Pike, Little Rock, Ark.

[illegible] to Honolulu, Hawaii.

Lieut. C. C. Phillips, Owensboro, to Panama Canal [illegible].

Capt. M. H. Yeaman, Henderson, to St. Elizabeth's Hospital, Washington, D. C.

Capt. D. P. Crockett, Hardy; Lieut. M. D. Hos[illegible] to Camp Pike, Little Rock, Ark.

Lieut. Finis London, Woodburn, to the inactive list.

Capt. H. T. Rivers, Paducah, and Lieut. F. T. Cartwright, Bowling Green, to Camp Dix, Wrightstown, N. J.

Lieut. A. C. Bond, Ashland, to Camp Gordon, Atlanta, Ga.

Lieut. J. H. Pritchett, Louisville, to Camp Pike, Little Rock, Ark.

Lieut. C. L. Venable, Franklin, to Camp Sevier, Greenville, S. C.

Lieut. J. B. Richardson, Jr., Louisville, to Camp Taylor, Louisville, Ky.

Capt. R. W. Ogilville, Princeton, to Camp Upton, Yaphank, L. I.

Lieut. J. Galvin, Louisville, to Camp Wadsworth, Spartanburg, S. C.

Lieut. G. D. Riggs, Hitesville, to Camp Grant, Rockford, Ill.

Lieut. Albert Stewart, Frankfort, to Camp Taylor, Louisville, Ky.

Lieut. G. A. Robertson, Louisville, to Fort Riley, Kansas.

Lieuts. W. D. Reddish, Lexington, and D. C. Donan, Morganfield, to the Neurological School, University of Pennsylvania, Philadelphia, Pa.

Lieut. A. C. Bond, Ashland, to inactive list.

Lieut. F. G. Kilgore, Louisville, to Army Medical School, Washington, D. C.

Newport, and M. C. Pentz, Nicholsville, to Camp Newport, and M. C. Pentz, Nicolasville, to Camp Beauregard, Alexandria, La.

Lieut. Clay Crawford, Fort Thomas, to Camp Greenleaf, Fort Oglethorpe, Ga.

Lieut. L. M. Tomlinson, Harveyville, and Geo. A. Beckett, Sunrise, to Camp Logan, Houston, Tex.

Capt. W. A. Lackey, Paducah, to Camp Meade, Annapolis Junction, Md.

Lieut. A. E. Holmes, Louisville, to Camp Mills, Garden City, L. I.

Lieut. W. T. Brunner, Louisville, to Camp Sevier, Greenville, S. C.

Lieut. R. B. Morris, Bowling Green, to Camp Travis, Fort Sam Houston, Tex.

Lieut. H. L. Nickell, Salt Lick, to Camp Wadsworth, Spartanburg, S. C.

Lieut. J. P. Wheeler, Carrollton, to Camp Wheeler, Macon, Ga.

Lieuts. W. B. Doherty, Louisville, and C. F. Voight, Valley Station, to Fort Benjamin Harrison, Hospital Train No. 20.

Lieut. J. D. Grant, Maysville, to Fort Oglethorpe, Georgia.

Lieut. O. P. Hodge, Grant's Lick, to Harvard Medical School, Boston, Mass.

Lieuts. W. J. Young, Louisville, and A. H. Belly, Shively, to Rockford, Ill.

Lieut. Van J. Davis, Paducah, to the inactive list.

Capt. R. M. Coleman, Lexington, to the inactive list.

Deaths

Dr. B. M. Tabor, Olive Hill, aged 45 years, died at his home November 8, following a prolonged illness.

LOUISIANA

The semi-annual session of the Fifth District Medical Society was held in Monroe, Oct. 15.

Dr. L. A. Herbert, of the City Hospital for Mental Diseases, has been granted leave of absence to enter the M.R.C.

State Health Officer Oscar Dowling attended the Southern Commercial Congress held in New York and the American Public Health Association held in Washington during October.

Major Isadore Dyer, New Orleans, attended the conventions of the National Board of Medical Examiners and the Medical Section of the Commission of National Safety held in Chicago during October.

The Orleans Parish Medical Society has decided upon remitting one-third of the fees collected from

(Continued on page 32)

AMERICAN-MADE SALVARSAN

(DIOXYDIAMINOARSENOBENZENE DIHYDROCHLORIDE)— (EHRLICH'S "606")

Salvarsan is now being made in our new Brooklyn laboratories under the supervision of Dr. G. P. Metz, who was instructed in the processes of manufacture at Hoechst, Germany.

It corresponds in every detail to the standards set by the late Professor Dr. Paul Ehrlich, and is the only product made by the processes used at the Hoechst works.

As is well known, the slightest irregularity in the process of manufacture of Salvarsan may cause the formation in it of toxic by-products. In order to protect the public and ourselves against the effects of any accidental irregularities in manufacture, we ascertain toxicologically whether or not each lot of Salvarsan prepared by us is free from such toxic by-products. This knowledge is obtained for us by the head of the Department of Biological Chemistry in one of our leading university medical schools, who bears the same judicial attitude to our preparations that Prof. Paul Ehrlich did to the standard German preparations, and who subjects our preparations to biological tests that he considers more rigorous and comprehensive than those adopted for this purpose by Prof. Ehrlich himself. We will market only such lots of Salvarsan as have been thoroughly tested by this biological chemist and pronounced by him to be free from injurious by-products. The name of our biochemical collaborator will be given to any who wish to consult us regarding the nature and results of his tests of our preparations. Thus far his tests have demonstrated that the preparations of Salvarsan made by us were fully equal to standard Ehrlich preparations in their freedom from toxic by-products.

This American-made Salvarsan will be sold to the medical profession direct, until local agencies have been satisfactorily established. The price to physicians will be $2.00 for the 0.6 gram size, with lower prices for the smaller sizes. The price to hospitals and dispensaries for clinical and charity use will be $1.50 per ampule of 0.6, in 50 and 100 ampule containers.

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122 Hudson Street
NEW YORK

(Continued from page 30)

the practice of those physicians at the front to the families of the M.R.C. officers.

Dr. G. W. Martin, Arnaudville, has been elected Supervisor of Oil Inspection in the State.

The Fourth District Medical Society held its semi-annual meeting at the Charity Hospital on Nov. 13. Dr. M. M. Bannerman, Grand Cane, was elected President; Drs. T. B. Tooke, Belcher and W. L. Stone, Homer, Vice-Presidents, and Dr. A. A. Herold, Shreveport, was elected Secretary-Treasurer.

Transfer of M.R.C. Officers

Lieut. K. F. Kosmodel, New Orleans, to Boston, Mass., for instruction in orthopedics.

Lieut. W. H. Reilly, New Orleans, to Camp Beauregard, Alexandria, La.

Lieuts. A. L. Lewis, Bogalusa, and Sidney F. Braud, New Orleans, to Fort Oglethorpe, Ga.

Lieut. J. G. Lilly, St. Joseph, to Camp Mills, Garden City, L. I.

Lieut. P. E. Parker, Bourg, to Camp Travis, Fort Sam Houston, Tex.

Lieut. W. T. McNeese, Augie, to Camp Wheeler, Macon, Ga.

Capt. T. P. Lloyd, Shreveport, to the Neurological School, Chicago, Ill.

Lieut. E. R. Bowie, New Orleans, to Cornell Medical College, New York, for course in roentgenology.

Lieut. T. A. Ragan, Shreveport, to Bellevue Hospital, New York, N. Y.

Lieut. Farrar B. Parker, New Orleans, to Reorganization Camp, Gettysburg, Pa.

Lieut. C. V. Sharp, New Orleans, to Camp Beauregard, Alexandria, La.

Lieut. T. I. St. Martin, Houma, to Camp Sevier, Greenville, S. C.

Lieut. W. R. Buffington, New Orleans, to Camp Wheeler, Macon, Ga.

Lieuts. J. W. Garrett, R. J. Platt, New Orleans, to Fort Oglethorpe, Ga.

Lieut. P. K. Rand, Alexandria, to Rockefeller Institute, New York, N. Y.

Lieut. F. R. Rougon, Oscar, honorably discharged from the service.

Lieut. L. S. Kushner, New Orleans, to Camp Dix, Wrightstown, N. J.

Lieuts. D. O. Willis, Leesville, and D. W. Kelly, Winnfield, to Camp Gordon, Atlanta, Ga.

Lieut. H. L. Crowe, Elmgrove, to Camp Lee, Petersburg, Va.

Lieut. E. B. F. Fagot, New Orleans, to Camp Logan, Houston, Tex.

Lieuts. D. I. Hirsch, Monroe, and A. G. Heath, Shreveport, to Camp Meade, Annapolis Junction, Md.

Lieut. C. P. Rutledge, Shreveport, to Camp Pike, Little Rock, Ark.

Lieut. C. L. Mengis, Norwood, to Camp Sevier, Greenville, S. C.

Lieut. R. E. Windham, Merryville, to Camp Shelby, Hattiesburg, Miss.

Lieut. Joseph R. D'Auncey, New Orleans, to Camp Sheridan, Montgomery, Ala.

Lieut. Louis Levy, New Orleans, to Seattle, Wash.

Lieut. W. R. Strange, New Orleans, to Camp Kelly, San Antonio, Tex.

Deaths

Dr. Thos. S. Kennedy, New Orleans, died at his home on Oct. 20.

Dr. Henry P. Lingo, Clinton, died at his home Oct. 10.

Dr. W. E. Sutherlin, Shreveport, aged 58, died at his home on Nov. 10 from pneumonia.

MARYLAND

Dr. R. F. Kieffer, Baltimore, now in service in France, has returned to his duties following a severe attack of fever caused by atmospheric conditions.

At the semi-annual meeting of the Carroll County Medical Society, which was held in Westminster Oct. 26, the following officers were elected: President, Dr. Luther Kemp, Uniontown; Vice-President, Dr. Geo. Brown, New Windsor; Secretary-Treasurer, Dr. H. M. Fitzhugh, Westminster. The Board of Censors: Drs. Daniel Sprecher, Sykesville; G. L. Wetzel, Union Mills; L. F. Legg, Union Bridge.

Dr. William S. Thayer, Baltimore, who is in Russia with the Red Cross, is now in charge of this work in Petrograd.

Dr. A. C. Harrison is convalescent after a serious abdominal operation, performed at St. Joseph's Hospital, Baltimore.

The Physicians' Civic Club of Baltimore has appointed a committee to study the needs of Baltimore and will apply for a new charter, giving up the charter granted it eighteen years ago.

Dr. A. G. Webster, Belmar, has been appointed to succeed the late Dr. Clayton, deceased, as Health Officer of the Fourteenth District of Baltimore County.

Transfer of M.R.C. Officers

Lieut. W. H. Kable, Woodsboro, to Camp Lee, Petersburg, Va.

Capt. C. W. Rauschebach, Baltimore, to Camp McClellan, Anniston, Ala.

Lieut. H. E. Austin, Baltimore, to Phipp's Clinic, Johns Hopkins Hospital, Baltimore, Md.

Capt. A. D. McConachie, Baltimore, to Plattsburg Barracks, New York.

Lieut. H. C. Schmeisser, Baltimore, to Rockefeller Institute, New York, N. Y.

Lieut. F. C. W. Reinhart, Baltimore, to San Antonio, Tex.

Maj. R. T. Taylor, Baltimore, to Washington, D. C.

Lieut. Milner Bortner, Whitehall, to Camp Jackson, Columbia, S. C.

Lieut. J. M. Elderdice, Salisbury, to Camp Joseph E. Johnston, Jacksonville, Fla.

Lieut. S. M. Price, Queenstown, to Camp Mills, Garden City, L. I., N. Y.

Lieut. S. A. White, Baltimore, to Camp Taylor, Louisville, Ky.

Lieut. R. E. Yellett, Fallston, to Camp Wheeler, Macon, Ga.

Lieut. J. R. Downes, Preston, to Hoboken, N. J.

Lieuts. Harry Diebel, Baltimore, and J. W. Long, Walkersville, honorably discharged from the M.R.C.

Lieut. J. C. Woodland, Chrisfield, to Army Medical School, Washington, D. C.

Lieut. L. G. Taylor, Perryville, to Camp Devans, Ayer, Mass.

Lieut. H. B. Titlow, Baltimore, to Camp Dix, Wrightstown, N. J.

Lieuts. D. Silberman, Baltimore, and G. M. Boyer, Damascus, to Camp Gordon, Atlanta, Ga.

Lieut. M. J. Hanna, Baltimore, to Camp Lee, Petersburg, Va.

Lieuts. A. G. Singewald, Baltimore, and C. N Branin, Hagerstown, to Camp Meade, Annapolis Junction, Md.

Lieut. P. R. Fisher, Denton, to Camp Pike, Little Rock, Ark.

Lieut. J. P. Eidson, Baltimore, to Camp Sevier, Greenville, S. C.

Lieut. G. H. Reinhardt, Baltimore, to Chickamauga Park, Ga.

Lieut. J. F. Lutz, Baltimore, to Rockefeller Institute, New York, N. Y.

Lieut. E. P. Simpson, Chance, honorably discharged from the M.R.C.

Lieut. A. M. Bacon, Baltimore, to Boston, Mass., for instruction in orthopedics.

Lieuts. J. S. Akehurst and W. L. Millea, Baltimore, to Camp Jackson, Columbia, S. C.

Lieuts. H. H. Johnston and A. F. Peterson, Baltimore, to Camp Wadsworth, Spartanburg, S. C.

Lieut. A. McC. Stevens, Easton, to Camp Wheeler, Macon, Ga.

Lieut. W. R. Geraghty, Baltimore, to Chicago, Ill., for instruction in neurology.

Lieut. J. A. Etheridge, Baltimore, to Hoboken, N. J.

Lieut. Harry Gross, Batlimore, to Pittsburg, Pa., for instruction in fractures.

Lieut. G. D. Wislocki, Baltimore, to Saranac Lake, N. Y.

Lieut. Fred Rankin, Baltimore, to the inactive list of the M.R.C.

Deaths

Dr. Sydney Bell, Salisbury, aged 74, died in New York, N. Y., from paralysis, October 16.

Dr. W. F. Clayton, Overlea, aged 35, died at his home of heart disease Oct. 12.

Dr. F. N. Sheppard, Crumpton, aged 78, died at his home Oct. 4.

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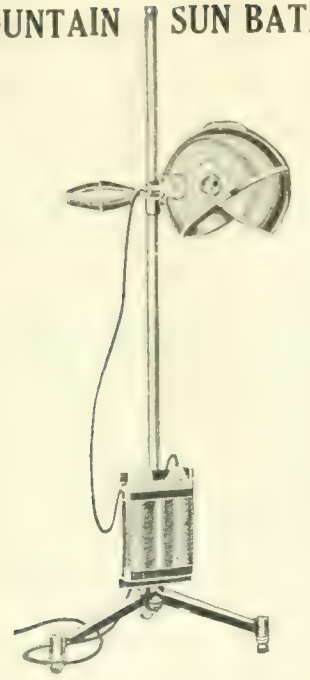
A MOUNTAIN SUN BATH



THE HEALING and curative effect of sunlight at very high altitudes has long been known. How to secure the same effect at low altitudes of great atmospheric density has long been a problem. The HERAEUS SUN LAMP solves it—enabling the Physician or Dermatologist to concentrate on obstinate cases a light rich in ultra-violet rays—without undue heat and free from scarification dangers, even after sustained application.

HAS THE SAME VALUE as systematic heliotherapy with the added advantages of convenience, economy and ease of operation. Used in leading Hospitals, Sanitoria and in War-zone Base Hospitals.

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Not All Bran
But Effective

Our doctor friends, some years ago, asked us to make a bran dainty.

They wanted a food which was staple and likable—a food to be continued.

They wanted the bran in flake form, to have maximum efficiency.

We made Pettijohn's for them—25 per cent bran flakes, hidden in soft rolled wheat. Now people are serving—largely by doctors' advice—nearly a million dishes weekly.

You will prefer Pettijohn's, we think, to any clear bran food when you know it. And so will those to whom you recommend it.

Pettijohn's

Rolled Wheat with Bran Flakes

Soft, flavory wheat rolled into luscious flakes, hiding 25 per cent of unground bran. A famous breakfast dainty.

Pettijohn's Flour is 75 per cent fine patent flour mixed with 25 per cent tender bran flakes. To be used like Graham flour in any recipe; but better, because the bran is unground.

The Quaker Oats Company

Chicago

(1753)

(Continued from page 33)

MISSISSIPPI

Transfer of M.R.C. Officers

Lieut. E. H. Wesson, New Albany, to Boston, Mass., for instruction in orthopedics.

Capt. J. S. McIntosh, Mt. Olive; Lieuts. C. C. Greene, Baldwyn, C. A. Martin, Clarksdale, D. S. Jameson, Houston, and F. R. Cook, Oak Vale, to Camp Beauregard, Alexandria, La.

Capt. B. H. Booth, Drew; Lieuts. J. R. Lanning, Corinth, and R. S. Annis, Stillmore, to Camp Jackson, Columbia, S. C.

Lieut. H. R. Carr, Water Valley, to Camp McClellan, Anniston, Ala.

Lieut. C. E. Lehmberg, Artesia, to Camp Mills, Garden City, L. I.

Lieut. W. A. D. James, Midnight, to Camp Travis, Fort Sam Houston, Tex.

Lieut. A. E. Wicks, Okolona, to Camp Wheeler, Macon, Ga.

Lieut. W. L. Britt, Jackson, to Fort McPherson, Atlanta, Ga.

Lieut. E. A. McVey, Lambert, to Fort Oglethorpe, Georgia.

Lieut. S. R. Boykin, Puckett, to Mineola, L. I.

Capt. W. R. McKinley, Columbus, to University Hospital, Philadelphia, Pa.

Lieut. Hewitt Johnston, Biloxi, to Washington University, St. Louis, Mo.

Lieut. J. E. McDill, Shaw, to Camp Kelly, San Antonio, Tex.

Lieut. H. R. Davis, North Carrollton, to Camp Pike, Little Rock, Ark.

Capt. A. M. Harrelson, Newton, to Camp Shelby, Hattiesburg, Miss.

Lieut. J. D. Westmoreland, Taylor, to Chickamauga Park, Ga.

Lieut. G. D. Mason, Clara, to Fort Oglethorpe, Ga.

Lieut. I. W. Cooper, Meridian, to Jackson, Miss.

Lieut. T. W. Reagan, Union, honorably discharged from the service.

Lieut. R. L. Johnson, Algoma, honorably discharged from the service.

Lieut. G. J. Mancill, Indianola, to the inactive list.

Lieutenants W. G. Byrd, Isola, and C. R. McKee, Sardis, to Camp Dix, Wrightstown, N. J.

Capt. R. M. Donald, Hattiesburg; Lieuts. J. Q. Fountain, Bay St. Louis; H. T. Cuming, Gloster, and W. S. Cranford, Laurel, to Camp Gordon, Atlanta, Ga.

Lieut. D. L. Walker, Vossburg, to Camp Jackson, Columbia, S. C.

Lieuts. G. H. Spivey, Hollandale, and J. W. Brandon, Pinckneyville, to Camp Lee, Petersburg, Va.

Capt. J. A. Slack, Friar Point, and Lieut. N. A. McLeod, Brookhaven, to Camp Pike, Little Rock, Ark.

Lieut. M. C. Garber, Meridian, to Camp Sevier, Greenville, S. C.

Lieut. J. G. Backstorm, Tutwiler, to Camp Wadsworth, Spartanburg, S. C.

Lieuts. J. L. Parkes, Carthage, to Chickamauga Park, Ga.

Lieut. H. A. White, Kirkville, honorably discharged from the service.

Lieut. A. W. McNeil, Ruleville, to Camp Hancock, Augusta, Ga.

Capt. E. F. Howard, Vicksburg, to Camp Logan, Houston, Tex.

Lieut. H. F. Sproles, Vicksburg, to Camp Wheeler, Macon, Ga.

Lieut. S. T. Wells, Alligator, to Kelly Field, San Antonio, Tex.

MISSOURI

Dr. F. M. Tisdel, Columbia, is giving a series of lectures to the Kansas City teachers who are taking work in the University Extension Service.

Drs. F. G. Nifong, Columbia; Ola Putman, Marceline, and Harold Bailey, Springfield, attended the convention of the Medical Association of the Southwest held in Kansas City during October.

Wood River physicians have announced an advance in fees which includes two dollars for day visits, three dollars for night visits and fifteen dollars for obstetrical cases.

Dr. John W. Vaughan, St. Louis, is recuperating from injuries sustained in an automobile accident.

The Greene County Medical Association held its meeting at Springfield Oct. 24.

The Greene County Medical Society has appointed a Committee on Industry "through which the lessons of preventive medicine will reach the laymen. The first article, or contribution, from this committee has been printed in the local papers.

Dr. W. W. Duke, Kansas City, delivered an address on "Dental Sepsis as a Focal Infection" before a joint session of the St. Louis Medical and Dental societies Nov. 2.

Drs. W. T. Waters and T. J. Downing, New London, were made Chairman and Secretary respectively, at a meeting of the Ralls County Auxiliary, Medical Defense Committee, held in New London on Nov. 5.

Dr. F. A. Baldwin has resigned as City Bacteriologist and Pathologist and has been succeeded by Dr. W. Schery. Dr. Baldwin has assumed scientific charge of the Virchow Laboratory.

Dr. Woodson Moss has retired from the faculty of the University of Missouri.

For the investigation of the "social side" of cancer, the Barnard Free Skin and Cancer Hospital, St. Louis, has appointed a Social Service Committee.

Following are the recently elected members and officers of the State Board of Health: President, Dr. W. J. Ferguson, Sedalia; Vice-President, Dr. T. H. Wilcoxen, Bowling Green; Secretary, Dr. G. H. Jones, Jefferson City; other members: Dr. T. A. Son, Bonne Terre; Dr. M. C. Hughes, St. Louis; Dr. W. A. Clark, Jefferson City, and Dr. T. W. Cotton, Van Buren.

Dr. James E. Ball, Richmond, is with the medical staff of the State Hospital, No. 2, St. Joseph.

Dr. J. E. Ball, Richmond, has been succeeded as Physician of Buchanan County by Dr. E. T. McGaugh, Richmond.

Dr. J. W. Vaughan, St. Louis, sustained severe injuries in an automobile accident on Oct. 24.

Maj. Llewellyn Sale, St. Louis, has been appointed for special study of cardio-vascular diseases at Camp Wadsworth, Spartanburg, S. C., and Maj. O. H. Campbell, St. Louis, has received a similar appointment at Camp McArthur, Waco, Tex.

Dr. H. C. Shuttee, West Plains, has been appointed a Councillor of the Twenty-seventh District to succeed Dr. J. H. Elliott, deceased.

Dr. J. C. Welch, Salem, has resigned as Penitentiary Physician and has been succeeded by Dr. W. A. Clark, Jefferson City.

Dr. E. H. Bullock, Edina, has been appointed Land Reclamation Commissioner.

Dr. Porter E. Williams, Bunceton, has succeeded Dr. E. H. Bullock, Edina, as Superintendent of State Hospital No. 2, Jefferson City.

The Atchison County Medical Society held a meeting at Rock Port Nov. 16.

The following physicians have been appointed by the Buchanan County Medical Society to serve as an Advisory Committee and to assist the exemption boards: Board No. 1, Drs. L. J. Dandurant, F. Ellison, F. G. Thompson; Board No. 2, Drs. J. Bansbach, J. F. Owens, F. H. Spencer; Board No. 3, Drs. Daniel Morton, J. M. Bell and A. R. Timmerman; County Board, Drs. C. R. Woodson, J. B. Reynolds and O. G. Gleaves.

Dean Hanau W. Loeb, St. Louis University, has been commissioned Major in M.R.C.

At the annual meeting of the Livingston County Medical Society held at Chillicothe Nov. 16, the following were the officers elected: President, Dr. G. W. Carpenter, Utica; Vice-President, Dr. A. Collier, Dawn; and Secretary-Treasurer, Dr. J. C. Shelton, Chillicothe.

The Alton County health officials have passed a resolution to prosecute all unlicensed physicians in that county.

The Carroll County Medical Society held a meeting and banquet at Carrollton Nov. 14.

Transfer of M.R.C. Officers

Lieuts. S. R. Johnson, St. Charles, and A. G. Wainwright, St. Louis, to Camp Bowie, Fort Worth, Tex.

Capt. A. H. Sippy, St. Louis, to Camp Funston, Fort Riley, Kansas.

Lieut. R. E. Byrnes, St. Louis, to Camp Hancock, Augusta, Ga.

Lieut. B. J. McMahon, St. Louis, to Fort Leavenworth, Kans.

Lieut. G. A. Griot, St. Louis, to Camp Logan, Houston, Tex.

(Continued on page 36)

The Advantages of Condensed Milk

PURITY

It is a well established fact that fresh cows milk may contain pathogenic organisms which spread infectious diseases. When even the slightest laxness exists in the enforcement of milk laws, there is danger.

The use of condensed milk eliminates this danger.

The following extract from Dr. Coutt's Report to the Local Government Board on an Inquiry as to Condensed Milk (London 1911) gives the findings of experts:

> "All epidemiological evidence points to the conclusion that the infecting organisms of such diseases as scarlet fever, diphtheria and enteric fever *are destroyed in condensed milk.*"

Whenever fresh cows milk is under suspicion, the use of a pure, carefully prepared infant food such as Borden's Eagle Brand becomes a prophylactic measure. Eagle Brand is pure; manufactured under the most sanitary conditions from selected high-grade milk and sugar.

For sixty years it has been the standard infant food.

BORDEN'S CONDENSED MILK CO.
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Grains
Super-Cooked

All Food Cells Exploded

Prof. Anderson's process by which Puffed Grains are made is this:

Selected wheat or rice grains are sealed in huge guns. The guns are revolved for 60 minutes in a heat of 550 degrees. Even 400 degrees will dextrinize grain, as you know.

The moisture in each food cell is thus changed to steam. Then the guns are shot, and the steam explodes. Over 100 million separate explosions occur in every kernel.

The grains are puffed to bubbles, eight times normal size. Every granule is broken for easy digestion.

No other process, we believe, so fits these grains for food.

The thin, crisp Puffed Grains taste like confections. Yet they are simply whole grains—nothing added.

You will find these delightful foods to advise when ease of digestion must be considered.

The Quaker Oats Company
Chicago (1749)

Puffed Wheat **Puffed Rice**
and Corn Puffs
All Steam-Exploded

(Continued from page 34)

Lieut. J. J. DeVore, [illegible], to Camp Sherman, Chillicothe, O.

Capt. Solon Cameron, St. Louis, to Camp Wheeler, Macon, Ga.

Lieuts. W. C. Vernon, Kansas City, and A. L. Fuerth, St. Louis, to Fort Oglethorpe, Ga.

Lieut. E. K. Dixon, St. Louis, to Neurological School, University of [illegible], Pittsburgh, Pa.

Capt. G. S. Scrutchfield, Farmington, to Walter Reed General Hospital, Takoma Park, D. C.

Lieut. S. B. [illegible], Kansas City, to Washington University, St. Louis.

Capt. J. G. Hayden and Lieut. F. R. Teachenor, Kansas City, to [illegible].

Lieut. E. K. Wells, Delring, to Camp Dix, Wrightstown, N. J.

Lieut. Reuben Appleberry, Leadwood, to Camp Benjamin, Fort Sam Houston.

Lieuts. S. B. Hirschburg, Kansas City, and S. E. Haynes, St. Louis, to Camp Funston, Fort Riley, Kan.

Lieut. H. C. Hays, Kansas City, to Camp Gordon, Atlanta, Ga.

Lieut. W. J. Ezickson, Webb City, to Camp Lee, Petersburg, Va.

Lieut. D. E. Mackey, Clayton, to Cornell Medical College, New York.

Lieut. P. M. Krall, Kansas City, to Rockefeller Institute, New York, N. Y.

Maj. V. P. Blair, St. Louis, to Washington University, St. Louis, Mo.

Lieut. C. O. C. Max, St. Louis, to the inactive list.

Lieut. N. D. McCormack, St. Louis, to Boston, Mass., for course in orthopedics.

Lieut. S. B. Avery, Troy, to Camp Doniphan, Fort Sill, Okla.

Lieut. J. R. Sanford, Kansas City, to Camp Funston, Fort Riley, Kan.

Lieuts. R. G. Cutler, Berger, and L. C. Randall, Licking, to Camp Greenleaf, Fort Oglethorpe, Ga.

Lieuts. N. A. Schwald, Cole Camp; G. H. Bragdon, Reeds, and J. T. Brennan, Vichy, to Camp Logan, Houston, Tex.

Lieuts. H. S. Langsdorf and J. H. Murphy, St. Louis, to Camp McArthur, Waco, Tex.

Lieut. W. A. Fair, Pleasant Hill, to Camp American University, Washington, D. C.

Lieut. H. A. Lowe, Springfield, to Camp Shelby, Hattiesburg, Miss.

Capt. M. A. Hanna, Kansas City, to Camp Travis, Fort Sam Houston, Tex.

Lieuts. J. B. Briggs, Bowling Green, and J. J. Kennedy, Frankford, to Fort Benjamin Harrison, Ind.

Lieuts. E. A. Hoeffer, Marcelene; D. Wyatt, Mineola; G. C. Kalmut, St. Louis; W. H. Allen, Ulrich, and O. S. Gilliland, Kansas City, to Fort Oglethorpe, Georgia.

Lieut. R. C. Shawhorn, Hale, to Cornell Medical College, New York.

Lieut. T. S. Blakesley, Kansas City, to Kansas City, Mo.

Lieut. C. O. Brown, St. Louis, to Mineola, L. I.

Lieut. D. E. Schmallhurst, St. Louis, to Montgomery, Ala.

Lieut. R. D. Streeter, Moberly, to Bellevue Hospital, New York, N. Y.

Lieut. C. M. Bauman, St. Louis, to Rockford, Ill.

Lieut. F. L. Morse, St. Louis, to Surgeon-General's office, Washington, D. C.

Capt. L. S. Milne, Kansas City, to Camp Cody, Deming, N. M.

Capt. Kurt Stumber, St. Charles, to Camp Funston, Kan.

Capt. C. A. Vossburg, St. Louis; Lieuts. H. R. Hill, Bachelor, and J. F. Bredick, St. Louis, to Camp Greenleaf, Fort Oglethorpe, Ga.

Deaths

Dr. E. A. Shay, St. Louis, aged 68, died at his home on Oct. 20.

Dr. J. M. Mansfield, Chillicothe, aged 78, died at his home Oct. 27.

Dr. B. S. Hanly, Mexico, aged 42, died at St. Louis Oct. 29.

Dr. P. H. Morrison, St. Joseph, aged 43, died at a hospital in Atchison, Kansas, from a complication of troubles Nov. 2.

Dr. J. A. Davis, Kansas City, aged 45, died at his home Oct. 27.

Dr. J. R. Smith, Ozark, aged 82, died from apoplexy on Nov. 14 at Springfield, Mo.

NORTH CAROLINA

Transfer of M.R.C. Officers

Lieuts. A. [illegible] Holt, [illegible], C. T. Rothrock, Wilmington, [illegible], to Camp Beauregard, Alexandria, La.

Lieut. W. A. [illegible], Greensboro, to Camp Greene, Charlotte, N. C.

Lieut. C. A. Hensley, Burnsville, to Camp Greenleaf, Fort Oglethorpe, Ga.

Lieut. P. J. Chester, Mooresville; G. B. Morris, Mt. [illegible], Kinston, Morehead, [illegible], to Camp Jackson, [illegible], S. C.

Capt. Raymond Pollack, Newbern, to Camp Sevier, Greenville, S. C.

Lieuts. N. H. Crews, Hendersonville; H. McL. Person, Saulston, and C. L. Swindell, Wilson, to Camp Wheeler, Macon, Ga.

Maj. J. S. Brown, Hendersonville, and Lieut. L. J. Arnold, Lillington, to Charity Hospital, New Orleans, La.

Lieut. J. S. McKee, Raleigh, to Walter Reed General Hospital, Takoma Park, D. C.

Lieut. I. W. Mayerburg, Selma, to Camp Hancock, Augusta, Ga.

Lieut. W. E. Brackett, Caroleen, to Camp Jackson, Columbia, S. C.

Lieut. K. A. Carroll, Raleigh, to Gettysburg, Pa., in Reorganization Camp.

Lieut. R. E. Dees, Greensboro, honorably discharged from M.R.C.

Lieut. M. R. Freeman, Bailey, to Camp Custer, Battle Creek, Mich.

Lieut. A. F. Jones, Ararat, to Camp Jackson, Columbia, S. C.

Lieut. J. L. Moore, Wendel, to Camp Joseph E. Johnston, Jacksonville, Fla.

Lieut. B. F. Cliff, East Flat Rock, to Camp Lee, Petersburg, Va.

Lieut. F. B. Spencer, Salisburg, to Camp Meade, Annapolis Junction, Md.

Lieut. T. J. Summey, Brevard, to Camp Sevier, Greenville, S. C.

Lieut. O. W. King, Mooresville, to Fort Oglethorpe, Georgia.

Capt. E. A. Lockett, Winston-Salem, to Bellevue Hospital, New York, N. Y.

Lieut. John Donnelly, Charlotte, to Walter Reed General Hospital, Takoma Park, D. C.

Lieuts. J. N. Mitchner, Kingston; C. Z. Chandler, Sylvia, and E. S. King, Sweethome, to the inactive list of M.R.C.

Lieut. J. M. Templeton, Cary, honorably discharged from the M.R.C.

Lieuts. L. W. Hovis, Charlotte; J. C. Greene, Greenville, and H. E. Starr, Greensboro, to Camp Dix, Wrightstown, N. J.

Lieut. J. S. Milliken, Buffalo City, to Camp Jackson, Columbia, S. C.

Lieuts. L. M. Fetner, Charlotte; E. T. Hardin, Clinton, and N. B. Cannady, Lourinburg, to Camp Lee, Petersburg, Va.

Lieut. J. G. Thomas, Greensboro, to Camp Meade, Annapolis Junction, Md.

Capt. W. T. Carstarphen, Wake Forest; Lieuts. C. E. McLean, Belmont, and S. W. Thompson, Jr., Sanatorium, to Camp Pike, Little Rock, Ark.

Capt. W. H. Crowell, Whiteville, and Lieut. T. B. Gold, Lawndale, to Camp Sevier, Greenville, S. C.

Lieut. R. B. Whitaker, Whiteville, to Camp Upton, Yaphank, N. Y.

Lieut. T. A. Hatchcock, Norwood, to Camp Wheeler, Macon, Ga.

Lieut. F. B. Wrenn, Siler City, to Fort Oglethorpe, Georgia.

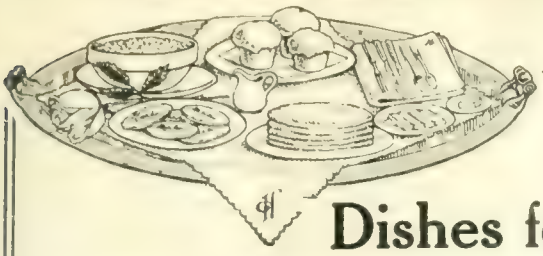
Lieut. Hickman Ray, Raleigh, to Rockefeller Institute, New York, N. Y.

Lieut. A. D. Morgan, Scotland Neck, to the inactive list of the M.R.C.

OKLAHOMA

Dr. L. H. Carleton, Resident Physician of the Oklahoma Hospital attended the annual meeting of the Southwestern Medical Association held in Kansas City during October.

(Continued on page 38)



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(Continued from page 36)

On account of the efficient work done by the State Board of Health [illegible] of infantile paralysis in Enid was easily confined.

The State Board of Health is carrying out its program of physical examinations in many of the educational institutions of Oklahoma.

The Northwestern Medical Association held its semi-annual session in Tulsa during November.

Dr. James J. Williams, Weatherford, has been elected Secretary of the Board of Medical Examiners to succeed Dr. Ralph A. Smith, Tulsa, who has resigned to join the M.R.C.

Jewell Schevitz, formerly Director of the Sanitary Survey of Union Hill, N. J., has been elected Secretary of the Oklahoma Association for the Study and Prevention of Tuberculosis.

On account of the rigid medical examinations in the schools of Muskogee, a diphtheria epidemic was successfully averted at a recent date.

City Health Officer Hawley, Tulsa, reports that the scarlet fever is well under control in the schools and city of Tulsa.

Transfer of M.R.C. Officers

Lieuts. C. W. Bacon, Enid, and R. E. Smith, Gracemont, to Camp Doniphan, Fort Sill, Okla.

Lieut. D. L. Garrett, Altus, to Philadelphia, Pa., for instruction in orthopedics.

Lieut. F. L. Carson, Shawnee, to the inactive list of the M.R.C.

Lieut. D. D. Paulus, Oklahoma City, to Camp Devans, Ayer, Mass.

Lieut. J. N. Hancock, Muskogee, to Camp Doniphan, Fort Sill, Okla.

Lieut. P. L. Coulter, Tulsa, to Camp Jackson, Columbia, S. C.

Lieut. H. DeW. Shankle, Hastins, to Fort Sill, Okla.

Lieut. A. L. Blesh, Oklahoma City, to Philadelphia, Pa., in University Hospital.

Lieuts. C. E. Houser, Vici; A. N. Earnest, Muskogee, and Maj. L. A. Conner, Coalgate, to the inactive list of the M.R.C.

Lieut. W. O. Fischer, Muksogee, to Army Medical School, Washington, D. C.

Lieut. J. A. Ryan, Oklahoma City, to Cornell College, New York, N. Y.

Lieut. C. F. Loy, Shawnee, to Camp Doniphan, Fort Sill, Okla.

Lieut. H. A. Griggs, Henrietta, to Gettysburg, Pa., in Reorganization Camp.

Lieuts. J. V. Hollis, Hobart, and Cecil Bryan, Vian, to Philadelphia, Pa., for course in orthopedics.

Lieut. E. B. Brooks, Shawnee, to Rockefeller Institute, New York, N. Y.

Lieuts. F. R. First, Cashion; C. E. Putnam, Oklahoma City, and G. W. Tilly, Prior, to Camp Beauregard, Alexandria, La.

Lieut. U. E. Nickel, Davenport, to Camp Cody, Deming, N. M.

Lieuts. D. S. Lee, Guymon, and P. R. Siberts, Cooperton, to Camp Doniphan, Fort Sill, Oklahoma.

Lieut. F. W. Rogers, Carnegie, to Camp Jackson, Columbia, S. C.

Lieut. I. F. Clark, Avant, to Camp Logan, Houston, Tex.

Lieuts. W. A. L. Gossey, Prague, and J. H. Jansen, Tryon, to Camp McArthur, Waco, Tex.

Lieut. F. L. Patterson, Fargo, to Chicago Neurological School.

Lieuts. M. C. Comer, Clinton; R. C. McCreery, Erich; G. A. Nylund, Gate, and Ross D. Long, Oklahoma City, to Mineola, L. I.

SOUTH CAROLINA

The Columbia Medical Society held a meeting at the Columbia Hospital Nov. 12.

Capt. A. C. Schaefer, Spartanburg, Sanitary Inspector, has begun the daily inspection of all cuts of meat that are sold in the city markets.

Transfer of M.R.C. Officers

Capt. Isadore Schayer, Columbia, to Chickamauga Park, Ga.

Lieut. W. B. Ackerman, Walterboro, to Camp Gordon, Atlanta, Ga.

Lieuts. F. P. Salley, Buffalo; C. D. Jacobs, Kingstree, and F. M. Harvin, Pinewood, to Camp Lee, Petersburg, Va.

Lieuts. H. H. Harris, Anderson, and L. W. Corbett, Barnwell, to Camp Meade, Annapolis Junction, Md.

Lieuts. T. M. Moore, Hagood, and W. J. Burdell, Lugoff, to Camp Upton, Yaphank, L. I.

Lieut. T. C. Galloway, Columbia, to Camp Kelly, San Antonio, Tex.

Lieut. T. O. Walker, Greer, to Camp Lee, Petersburg, Va.

Lieut. J. M. Oliver, Orangeburg, to Camp Pike, Little Rock, Ark.

Lieut. C. C. Fishburne, Scotia, to Mineola, L. I., N. Y.

Lieut. W. E. Lester, Lake View, to Camp Lee, Petersburg, Va.

Lieut. K. L. Able, Leesville, to New York for instruction in orthopedics.

Lieut. W. S. McMurray, Lockhart, to San Antonio, Tex.

Maj. Francis L. Parker, honorably discharged from the M.R.C.

Lieuts. J. A. Norton and F. D. Mower, Conway, to Camp Jackson, Columbia, S. C.

Lieut. B. McQ. Montgomery, Kingstree, to Camp Wadsworth, Spartanburg, S. C.

Lieuts. D. D. Strauss, Bennettsville, and D. L. Bryson, Winnsboro, to Fort Oglethorpe, Ga.

Capt. C. W. Kollock, Charleston, to Philadelphia, Pa., Aviation Section.

TENNESSEE

A memorial meeting of the Chattanooga Academy of Medicine and the Hamilton County Medical Society was held September 21 in memory of Drs. Rich and M. M. Wagner.

Dr. E. M. Sanders, Nashville, has succeeded Dr. R. E. Fort as a member of the State Board of Health.

The Chattanooga Medical Academy held its annual Clinical Congress during November.

Dr. W. J. Miller, Nashville, has been elected Vice-President of the State Board of Health.

Transfer of M.R.C. Officers

Lieut. L. B. Robinson, Memphis, to Boston, Mass., at the Base Hospital.

Lieut. Nicholas Ardan, Bristol, to Camp Jackson, Columbia, S. C.

Lieut. H. T. Moore, Chattanooga, to Camp Kearney, Linda Vista, Cal.

Capt. W. A. Carnes, Memphis, to Northwestern University Dental School, Chicago, Ill.

Lieut. J. H. Herring, Memphis, to Fort Oglethorpe, Georgia.

Lieuts. J. W. McClaren, Jackson, and H. L. Fraser, Nashville, to Fort Sam Houston, Tex.

Lieuts. H. H. Shoulders, Nashville, and S. S. Evans, Ripley, on tour of State for purpose of medical examinations.

Lieut. F. J. O'Connor, Jackson, to Camp Kelly, San Antonio, Tex.

Lieut. H. L. Acuff, Knoxville, to Base Hospital No. 66, Venereal Hospital, to Tenafly, N. J.

Lieuts. G. W. Bugg, Nashville, and T. W. Rhodes, Whiteville, to the inactive list of the M.R.C.

Lieut. R. B. Griffin, Ridgeley, honorably discharged from service of M.R.C.

Deaths

Dr. Thos. E. Elliston, Nashville, died at his home on Oct. 18.

Dr. Joe James Harrison, London, aged 84, died at his home Oct. 24.

Dr. R. M. Richardson,. Chattanooga, died at his home on Sept. 18, the cause of death being tuberculosis.

Dr. J. C. Ewing, Lewisburg, aged 77, died at his home on Oct. 28.

Dr. R. L. Ray, Monterey, aged 50, dropped dead from heart failure on Oct. 30 while in his office.

Dr. C. B. Atchley, Knoxville, was killed in an auto accident on November 11.

(Continued on page 40)

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(Continued from page 38)

Dr. I. P. Gose, aged 45, Bristol, died at Provo, Utah from injuries sustained in an automobile accident on Nov. 13.

TEXAS

The Tarrant County Medical Society entertained the officers of the M.R.C. at Camp Bowie at a banquet held at the Metropolitan Hotel on Oct. 19.

Health authorities, assisted by Maj. J. M. Holt, U. S. Public Health Service, are making a health survey of Harris County.

The McLennan County Medical Association held a meeting Oct. 17, at which time the members pledged their support for the Better Babies contest held during the Cotton Palace.

Secretary of War Baker has been petitioned by the city and county boards of health to send a health expert for service in San Antonio.

The Dallas County Medical Society held a Liberty Loan meeting at Baylor College on Oct. 25.

The sanitary conditions of hotels and restaurants of Houston have been investigated by Maj. H. H. Tuttle, 33d Division, Sanitation Inspectors.

The Hill County Medical Society met at Hillsboro on Oct. 19.

The Lone Star Medical Society, organization of Negro medical doctors, met at Dallas during October.

A meeting of the Texas Social Hygiene Association was held in Dallas Oct. 24 to perfect plans of organization.

Dr. M. J. Bliem, San Antonio, has begun a second series of lectures on public health nursing in connection with the local chapter of the American Red Cross Association.

Dr. David E. Rouse, Chillicothe, O., has been appointed a member on the Bureau of Rural Sanitation of the State Health Department.

A number of the wives of physicians of San Antonio have organized an auxiliary to the Bexar County Medical Association.

Dr. L. W. Hollis, of the State Board of Health, has returned from Washington, having attended the Congress of the Public Health Association held there during October.

State Board of Health officials are making a thorough survey of sanitary conditions of adjacent farms to the aviation field in Dallas.

On November 19 an extensive course of instruction will begin for the medical officers of the 19th Division, Camp Travis.

The Texas Eclectic Medical Association held its thirty-fourth annual session in Waco during November. Waco was again chosen as the next meeting place and the following officers elected: President, D. J. Thomas, Lockney; First Vice-President, G. M. Williams, Merkel; Second Vice-President, P. H. Mitchell, Waxahachie; Secretary, H. H. Blankmeyer, Aransas Pass; Treasurer, W. W. Mimer, Honey Grove.

Through the efforts of Dr. Grady Shytles, Field Director of the State Board of Health, the Commissioners of Johnson County have appropriated $800.00 to inaugurate rural health work in that county.

Maj. Oakley, Surgeon, U.S.P.H.S., will conduct the sanitary survey of Camp Bowie and Fort Worth.

The Fourth District Medical Society held its annual meeting in Brownwood Nov. 6-8.

The following committee has been appointed by the Mayor of Dallas to study and investigate the subject of medical inspection of school children: Drs. John S. Turner, W. J. Calvert, G. W. Staples and A. W. Carnes.

Medical inspection for the Vickery Place school has begun.

Tarrant County has appropriated $13,220 for health survey of the county and zones about Camp Bowie and aviation fields.

The Williamson County Medical Society held a meeting in Georgetown, Nov. 17.

Dr. Walter D. Brown, Beaumont, was elected Secretary of the Jefferson County Medical Society at a recent meeting to succeed Dr. A. H. Braden, resigned.

Transfer of M.R.C. Officers

Lieut. R. A. Trumbull, Dallas, to Austin, to the University of Texas.

Maj. C. S. Venable, San Antonio, to Boston, Mass.

Lieut. G. L. Longworthy, Lake View, to Camp Grant, Rockford, Ill.

Capt. C. McC. Hendricks, El Paso, to Camp Travis.

Capt. T. C. Brooks, Bay City, to Chicago, Ill.

Lieuts. D. H. Mevane, R. K. Simpson and P. H. Street, Galveston; W. D. Petit, Marfa, and F. H. Moose, Weatherford, to Fort Sam Houston, Tex.

Lieut. E. W. R. Williams, Celeste, to Fort Worth, Tex.

Lieut. Paul Gallaghar, El Paso, to the inactive list of the M.R.C.

Lieut. J. H. Pill, Heath, to the inactive list of the M.R.C.

VIRGINIA

Dr. E. B. Gianniny, of the State Board of Health, and Chief Lowman have finished a tour of inspection of Covington.

Physicians of Norfolk and vicinity will regret to learn of the death, in Philadelphia, of Dr. Ward B. McCaffery, aged 42, formerly connected with the quarantine office at Fort Monroe.

Drs. W. H. Ribble and John T. Graham attended the Virginia State Medical Association in Roanoke during November.

Dr. J. F. Stover, Crabbottom, has been commissioned First Lieutenant in the M.R.C.

Dr. T. Clark, U.S.P.H.S., has returned to Washington after aiding the health authorities of Newport News in an inspection of schools and school children in that city.

Dr. Sherwood Dix, Health Officer of Norfolk County, has resigned his position.

The Virginia State Medical Association held its annual meeting in Roanoke during November.

Dr. Ennion G. Williams, Richmond, was elected President of the Virginia State Medical Association during its recent convention.

Dr. J. C. Bodow and Dr. C. F. Cockey have been elected President and Secretary, respectively, of the Prince George Hospital Association that has been recently incorporated at Hopewell.

Dr. Roy K. Flannagan, Chief Health Officer of Richmond, has appointed eight inspectors to care for the sanitation of the eight districts of the city that he has recently mapped out.

Drs. Stuart McGuire and T. C. Firebaugh, Richmond, have resigned from the State Board of Health to join the M.R.C.

Dr. H. T. Marshall, Charlottesville, has succeeded Dr. Firebaugh on the State Board of Health.

Dr. C. C. Hudson, Danville, has been appointed all-time Health Officer of Charlotte, N. C.

Dr. G. C. Holladay, Portsmouth, has resigned as Coroner of Norfolk and has been succeeded by Dr. E. T. Glover.

The James City Medical Society held its annual meeting in Williamsburg during November, and the following officers were elected: President, Dr. J. M. Henderson, Williamsburg; Vice-President, Dr. A. M. Sneed, Toano; Secretary-Treasurer, Dr. D. J. King, Williamsburg.

At the annual session of the James City Medical Society, a resolution was adopted whereby the members of the Society are to pay $50 per annum to the wives or dependents of the members who go into the service of their country.

Transfer of M.R.C. Officers

Lieut. B. L. Jarman, Charlottesville, to Army Medical School, Washington, D. C.

Lieut. W. S. Wiley, Bristol, to Camp Lee, Petersburg, Va.

Lieut. C. W. Sale, Fredericksburg, to Fort Sam Houston, Tex.

Capt. E. M. Parker, Emporia, to Roosevelt Hospital, New York, N. Y.

Lieut. Chas. Phillips, Richmond, to Bellevue Hospital, New York, N. Y.

Lieut. K. B. Steele, Charlottesville, to Philadelphia, Pa., for instruction in orthopedics.

Deaths

Dr. J. E. Brownell, Ridgeville, died at his home Nov. 9.

(Continued on page 42)

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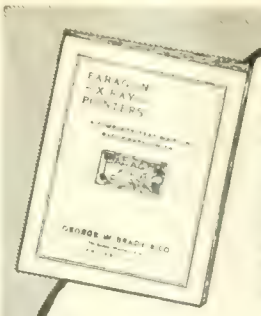

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CHICAGO

PARAGON X-RAY PLATES

(Continued from page 40)

Dr. M. L. Withers, Wallace, died at a hospital in Richmond Nov. 10.

Dr. I. F. Gose, Russell County, aged 45, died at Provo, Utah, on Nov. 15 from injuries sustained in an automobile accident.

WEST VIRGINIA

The graduating exercises of the Chesapeake and Ohio Hospital School for Nurses were held in Huntington on Oct. 26.

Dr. J. A. Campbell, Charleston, has been appointed County Health Officer to succeed the late Dr. J. S. Daniel.

Dr. Robert Wriston, Charleston, has been appointed [illegible] to the County Infirmary.

Dr. G. C. Robertson, Charleston, has been appointed by the Governor to succeed Dr. C. A. Barlow as Superintendent of the Spencer State Hospital for the Insane.

The State Health Department has been forced to fine several Roane County Physicians on account of failure to report births, deaths and contagious diseases. The Board is determined to get complete health returns.

Dr. G. W. Banks, Shepherdstown, has been confined to his home for some weeks suffering from intercostal neuralgia.

Transfer of M.R.C. Officers

Lieut. D. E. Jarrell, Woodville, to Camp Dix, Wrightstown, N. J.

Lieut. R. H. Edmundson, Morgantown, to Camp Gordon, Atlanta, Ga.

Lieut. F. J. Broschart, Marting, and Lieut. C. S. Cowle, Martinsburg, to Camp Lee, Petersburg, Va.

Lieuts. C. A. Harper, Amma; R. M. Pedicord, Elm Grove, and Emerson Mcgrail, Wheeling, to Camp Pike, Little Rock, Ark.

Lieut. C. F. Mahood, Alderson, to the inactive list of the M.R.C.

Lieuts. A. N. Henson and L. A. Petty, Charleston, to Army Medical School, Washington, D. C.

Capts. G. H. Barksdale and J. W. Moore, Charleston, and Lieut. D. P. Scott, Ashland, to Walter Reed General Hospital, Washington, D. C.

Lieut. R. K. Buford, Princeton, to the inactive list of the M.R.C.

Lieut. C. E. Park, Parkersburg, to Camp Hancock, Augusta, Ga.

Lieut. J. K. Cowherd, Ridgeley, to Camp Wheeler, Macon, Ga.

Death

Dr. S. J. Daniel, Lester, aged 52, died at his home Oct. 23 from accidental poisoning.

PLACEBOES

DEFINITION

Appendicitis: Operation upon a man rolling in wealth for removal of the roll.—*Exchange.*

AN OUNCE OF PREVENTION

Dr. Brown was a phlegmatic man who usually took his own time at answering even urgent calls, but one day he bustled around in a great hurry.

"Mrs. Weaver has sent for me to come and see her boy, and I must go at once," he said.

"What is the matter with the boy?" asked the doctor's wife.

"I don't know," he said, "but Mrs. Weaver has a book on 'What to Do Before the Doctor Comes,' and I must hurry up before she does it."—*Exchange.*

TIME TO CALL ONE NOW

"Mother, is it true that an apple a day keeps the doctor away?"

"Yes, Jimmie. Why?"

"'Cause if it is, I kept about ten doctors away this morning."—*Life.*

THE DOCTOR AHEAD

"If I were so unlucky," said an officer, "as to have a stupid son, I would certainly make him a doctor."

"Well," said a doctor who was in the company, "you think differently, sir, from your father."—*Medical Record.*

WHICH?

While reading the morning paper, Miss Sarah suddenly exclaimed: "How dreadful! Rev. Mr. Marigold taken to the hospital, a victim of locomotor ataxia."

"I wonder," said her sister Susan, "whether the poor man was run over or whether the thing blew up with him?"—*Philadelphia Public Ledger.*

IN THE MILLENNIUM

Doctor (to his patient): "Your ailment, my dear man, is a puzzle to me, and I haven't the slightest idea of how to cure you. Yet, you might try these pills. I know they are harmless and the psychological effect upon you may, after all, be beneficial."—*Exchange.*

NOT AS USUAL

Doctor: "Well, Casey, are the eyes improving?"

Patient: "Sure, they are, sir?"

Doctor: "Can you see better; can you see your nurse now?"

Patient: "Sure, I can that, sir. Faith she gits plainer and plainer ivery day."—*London Opinion.*

A METHOD OF DIVISION

L—, who was full of pranks, was taken ill. "We must be careful," said his doctor, "or I will send you a nurse of not less than fifty years of age."

"Rather," replied —, "send me two, each twenty-five years old."—*Gaietes de la Medicine.*

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[illegible] light bath is [illegible] Standardized production in large quantity permits us to make this marked reduction.

[illegible] "The Use of Radiant Light and Heat [illegible]

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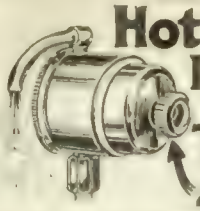

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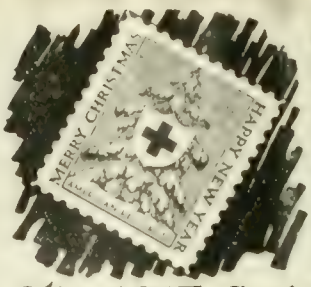

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DIURETIC
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Mulford Antipneumococcic Serums

For the Specific Treatment of Lobar Pneumonia

Lobar pneumonia is caused chiefly by the pneumococcus, of which there are three different fixed types and a fourth group, including possibly twelve different types.

Types I and II are responsible for about 70 per cent of cases, with an average mortality, **without** serum treatment, of from **25 to 30 per cent. With** serum treatment the mortality of Type I has been reduced to from **5 to 8 per cent.**

Type III is responsible for from 10 to 15 per cent of cases, with a death rate of 50 per cent.

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Mulford Antipneumococcic Serum Polyvalent is highly protective against pneumonia caused by Type I, and contains antibodies against Types II and III.

The serum is tested and standardized by tests on mice; 1 c.c. must protect against 500,000 fatal doses of Type I cultures.

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The dose is from 50 to 100 mils (c.c.) intravenously, repeated about every six to eight hours until the patient successfully passes the crisis. Most cases will require 300 mils (c.c.) or more. It is safe to administer the serum intravenously in large and repeated doses. When the serum is injected intramuscularly, the results are slower and less effective.

Mulford Antipneumococcic Serums are furnished in packages containing syringes of 20 mils (c.c.) each, and in ampuls of 50 mils (c.c.) for intravenous injection.

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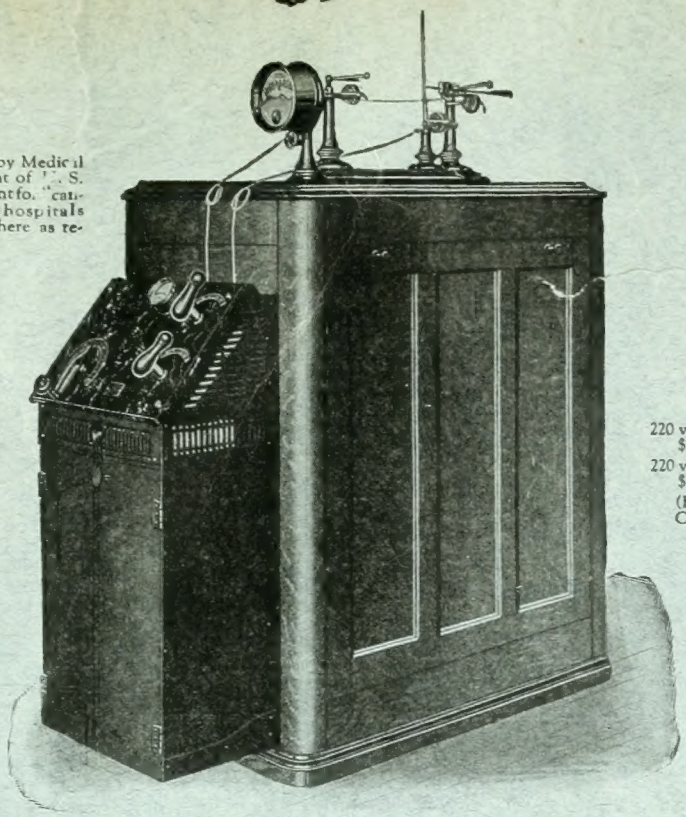

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Chloretone induces natural sleep.

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It produces no objectionable after-effects.

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